UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

In cooperation with

STATE AGRICULTURAL EXPERIMENT STATIONS

COMPARISON OF WINTER WHEAT VARIETIES GROWN IN COOPERATIVE NURSERY EXPERIMENTS IN THE HARD RED WINTER WHEAT REGION IN 1992

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This is a joint progress report of cooperative investigations under way in the State Agricultural Experiment Stations and the Agricultural Research Service of the U. S. Department of Agriculture containing preliminary data which have not been sufficiently confirmed to justify general release. Interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. The report is primarily a tool for use of cooperators and their official staffs and for those persons having direct and special interest in the development of agricultural research programs.

The report includes data furnished by the State Agricultural Experiment Stations as well as by the Agricultural Research Service and was compiled in the Northern Plains Area, U. S. Department of Agriculture. The report is not intended for publication and should not be referred to in literature citations nor quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

Lincoln, Nebraska
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NORTHERN PLAINS AREA

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By

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REGIONAL NOTES

The 1992 Hard Red Winter Wheat Breeders Field Day was held in June, 1992 at Bushland, TX, hosted by Texas A&M wheat researchers. The 1993 Breeders Field Day is tentatively scheduled for June 3 at Lincoln, NE and will be hosted by USDA-ARS and University of Nebraska wheat researchers.

Dave Johnston, wheat breeder with Cargill hybrid wheat program, retired in January of 1993. Dave was an active member and supporter of the Regional Wheat Workers Committee and we wish him the best in his retirement.

Dr. Phil Bruckner is the new winter wheat breeder at Bozeman, Montana with Montana State University. Dr. Bruckner has taken over the position formerly held by Dr. Allan Taylor. The position was filled on an interim basis over the last few years by Dr. Gene Hockett, who retired in 1992.

Dr. Jim Anderson is the new winter wheat breeder at Fargo, North Dakota with NDSU. Dr. Anderson replaces Dr. Darrell Cox, who has taken a position in agricultural research in Africa.

Dr. Jeffery Gellner, winter wheat breeder at SDSU, Brookings, South Dakota, resigned his position in August, 1992 to pursue new opportunities in the field of law. The position is in the process of being refilled. Dr. Fred Cholick, Head of the Plant Science Department at SDSU, is coordinating the winter wheat program in the interim.

NOTE: The response reaction of entries to leaf and stem rust infection has been coded on a 1-9 scale to facilitate generation of this report. This same scale has been used in past reports. The response data can be interpreted as follows:

Response scale		Reaction type
1	-	VR
2	-	R
3	-	MR
4	-	M
5	-	M
6	-	M
7	-	MS
8	-	S
9	-	VS

NEW VARIETIES AND GERMPLASM

The following is only a partial list of new wheat varieties and germplasms available in the region. Included are those for which we have current information.

VARIETIES

The Colorado Agricultural Experiment Station announced the release of 'Jules' hard red winter wheat. Jules has the pedigree 'NE76667/Hawk' and was tested in the SRPN as CO860094. Jules is a semidwarf variety for production in eastern Colorado and the High Plains area. It has improved leaf rust resistance and straw strength, lower test weight, and higher grain yields when compared to Lamar.

The Nebraska Agricultural Experiment Station and USDA-ARS announced the release of 'Vista' hard red winter wheat. Vista (PI 562653) has the pedigree 'NE68513/NE68457//Centurk/3/Brule' and was tested in the SRPN as NE87615. Vista is targeted for dryland production in southwest Nebraska and may be adapted to irrigated production in western Nebraska. It possesses rust resistance genes Lr3 and Lr16 and Sr6, Sr17, and Sr36 and the H3 gene for resistance to Hessian fly. Winterhardiness is superior to TAM-200 and Rawhide and similar to, or slightly less than, Scout 66. Vista is similar in anthesis date to Arapahoe and Redland with straw strength less than Redland. Vista has strong mixing characteristics and acceptable baking quality, similar to, or better than Scout 66 and Arapahoe.

AgriPro Biosciences has indicated the intent to release two hard red winter wheat varieties in 1993. 'Ogallala' is derived from the cross 'TX81V6187/Abilene' and has been entered in the 1993 SRPN under the experimental designation WI89-055. Ogallala is targeted for western production areas of the central plains, similar to areas where TAM-107 and TAM-200 are grown. 'Ponderosa' is derived from the cross 'W81-133/Thunderbird' and has been entered in the 1993 SRPN under the experimental designation W87-017-44. Ponderosa is targeted for production in Kansas, west central and irrigated acreages in Nebraska, and for irrigated production in Colorado. AgriPro also announced a change in the variety name for the experimental line WI88-181 to 'Pecos'. Initially released as 'Falcon', a conflict over the name resulted in the change to Pecos. Pecos was tested in the 1992 SRPN.

The Kansas Agricultural Experiment Station and USDA-ARS announced the release of 'Arlin' (PI 654246) hard white winter wheat. Arlin originated from a bulk population of intercrossed winter and spring wheats and was tested in the SRPN under the designation KSSB-369-7. Arlin is early maturing with adequate, but not good, winterhardiness and is targeted for production in southwest Kansas. It is moderately resistant to SBMV, stem and leaf rust. Arlin has excellent milling properties with dough mixing properties similar to Newton.

The Kansas Agricultural Experiment Station and USDA-ARS also announced the release of 'Karl 92' (PI 564245) hard red winter wheat. Karl 92 is an F_{11} headrow selection from Karl and tested in the SRPN as KS831374-142. Karl 92 has slightly improved leaf rust resistance, earlier maturity, and is higher yielding than Karl. It has essentially the same quality characteristics as Karl.

GERMPLASM

The USDA-ARS, Kansas Agricultural Experiment Station, and the Wheat Genetics Resources Center at KSU announced the release of several hard red winter wheat germplasms in 1992:

KS92WGRC15 is derived from the cross Karl//TAM-200/KS86WGRC2. It results from the effort to transfer the Lr39 gene for resistance to leaf rust to a more desirable genetic background. KS92WGRC15 is similar to Karl in height and overall phenotype, heads one day later, and is homozygous for the 1AL/1RS wheat-rye chromosome.

KS92WGRC16 is derived from the cross Triumph 64/3/KS8010-71/TA2470//TAM-200 where TA2470 is an accession of Triticum tauschii. KS92WGRC16 carries a single, completely dominant gene for leaf rust resistance that segregates independently from other known resistance genes. It is similar to TAM-200 in height and days to heading, but lacks the 1AL/1RS translocation and is extremely susceptible to mildew.

KS92WGRC21 and KS92WGRC22 are wheat germplasms highly resistant to a wheat spindle streak and soilborne mosaic viruses. KS92WGRC21 is derived from the cross TAM-200*3/TA2570 and KS92WGRC22 from the cross Century*3/TA2567. TA2570 and TA2567 are closely related accessions of Triticum tauschii. The genetic basis of resistance has not been determined, but it appears that resistance to the two viruses are conditioned by different loci. It is not known if KS92WGRC22 carries gene(s) for resistance to spindle streak mosaic from TA2567 in addition to those from Century. The germplasm lines are similar in plant height, maturity, and overall phenotype to their respective recurrent parents.

KS92WGRC23 is derived from the cross Karl*3//PI266844/PI355520, where Karl was initially pollinated with an F_1 plant of Triticum monococcum (PI266844/PI355520). KS92WGRC23 carries leaf rust resistance genes derived from one or both of the T. monococcum parents. It is similar to Karl in height and overall phenotype, but heads two days later.

1992
Southern Regional Performance Nursery

Entry No.	Variety or Pedigree	Sel. No.	Source
1**	Kharkof	CI1442	Check
2**	Scout 66	CI13996	"
3**	TAM-107	PI495594	"
4	Csm*3/3/Newton/Largo//2*Csm	OK88W833	Oklahoma
5*	Cty sib/4/Aiv/3/Tcs//TI sib/Sdy	OK89499	"
6*	2165/Cty sib	OK89399	"
7*	OK83197/Sxl	OK89421	"
8	TX78V2154/Siouxland	TX88V4636	Texas
9	Vona/TX71D4889-V3	TX84V1418HF	"
10	Karl Resel.	TX88V5440	"
11	TX78V2154/Siouxland	TX88V4635	"
12	TAM-105/3/NE70654/BBY/Bow's'	TX87V1613	"
13	NE78696/Payne	TX88V4524	"
14	TAM-200//TX38949-2/TAM-107	TX89V4138	"
15	Karl Resel.	TX88V5433	"
16*	Siouxland/TAM-101	TX88A6480	"
17*	TX71A889/TAM-101	TX88A6533	"
18	TX73165/Sandy	CO860086	Colorado
19	NE76667/Hawk (Jules)	CO860094	"
20*	Sandy/Hail	CO860235	"
21*	Arkan/Hawk	CO870449	"
22	Bulk Selection (Arlin)	KSSB-369-7	Kansas
23*	Karl sib (Karl 92)	KS831374-142	"
24*	Hawk/(Pkg16/Lov13//Jgw13)//TAM-108	KS84170E-8-3	"
25*	TX71A889/2172//2157	HBC302E	"
26*	Lr16/Lr17//Larned/3/Cheney/Larned/4/ Bnt sib/5/TAM107	KS87H325-2	"
27*	Dular/Eagle//2*Cheney/Larned/3/Colt	KS89H48-1	"
28*	" " "	KS89H50-4	"
29*	NE69565//NE65671/NE69655/3/Homestead/4/ Ctk/3/At66/Cmn//TX2607-6	N87V106	NE, USDA
30	Arkan/Colt//Chisholm sib	NE88595	Nebraska
31	Bennett/TAM-107	NE88427	"
32*	Centura/Dawn//Colt sib	NE88584	"
33*	" "	NE88588	"
34*	Quantum Hybrid Wheat	XH1319	HybriTech
35*	" "	XH1436	"
36*	" "	XH1437	"
37*	" "	XH1497	"
38*	Colt/Victory (Laredo)	W87-018	Agripro
39*	WI81-133/Arkan (Pecos)	WI88-181	"
40*	W84-179/W81-171	WI88-028	"
41*	TAM-107/TAM-105	T13	Trio
42	2165/Vona	T67	"
43	TAM-108/Lancota	T21-3	"
44**	HRW Hybrid	TH901	"
45**	HRW Hybrid	TH902	"

* New Entry
** New Seed Provided

TEST SITE INFORMATION - SRPN

Clovis, NM -- The irrigated nursery was planted on 9/23/91 in fallow land that was in sorghum during 1990. Plots were irrigated on 9/26/91, 3/2/92, 4/10/92, and 5/2/92. Fertilizer rates consisted of: 131 lbs/a N and 52 lbs/a P_2O_5. Seeding rate was 90 lbs/a. Harvested on June 25, 1992. The dryland nursery was planted on 9/23/91 at a rate of 40 lbs/a. Rainfall during the summer of 1991 and spring of 1992 was above normal and there was ample water for stand establishment and grain fill. Fertilizer rates were 11 lbs/a N and 52 lbs/a P_2O_5. Harvested June 16.

Farmington, NM -- No additional information provided.

Bushland, TX -- No additional information provided.

Chillicothe, TX -- No additional information provided.

Dallas, TX -- No additional information provided.

Prosper, TX -- The year was highlighted by record rainfall amounts in the fall and a very mild winter.

Stillwater, OK -- Harvested on June 17, 1992. Leaf rust was a factor at all Oklahoma sites except Goodwell. Nurseries at Lahoma and Stillwater experienced some freeze damage.

Lahoma, OK -- Harvested on June 22, 1992.

Altus, OK -- Harvested on June 16, 1992.

Goodwell, OK -- Harvested on July 7, 1992.

Hutchinson, KS -- Planted on 10/15/92 and harvested 6/23/92. The nursery was planted in a completely dry seedbed and did not emerge until after a rain occurred October 31. The extremely warm and mild winter allowed for active growth and crop development was extremely good. Leaf rust overwintered throughout the nursery. Spring conditions were predominately cool and moist resulting in good plant development. Leaf rust was extremely heavy, susceptible lines were 100-S at heading. Glume blotch also reduced yields. Lines with good general disease resistance were favored. Lines with good stem filling capability also did better than expected.

Manhattan, KS -- Planted on 10/7/91 and harvested 7/2/92. The nursery was planted in a completely dry seedbed and did not emerge until a rain occurred October 31. A warm and wet winter allowed active growth throughout the winter. Sufficient growth had occurred by spring green-up to off-set the late fall emergence. Hot, dry and windy conditions reduced growth during jointing, and reduced yield potential. Cool, wet weather dominated during flowering and grain filling. Leaf rust and glume blotch (S. Nodorum) were the primary leaf diseases. Wheat soil-borne mosaic was

observed but sporadic throughout the nursery. Selections with good disease resistance were favored.

Hays, KS -- No additional information provided.

Garden City, KS -- No additional information provided.

Colby, KS -- Planted into fallow ground with preplant fertilizer at the rate of 42-0-0. Topsoil moisture at planting was limited and initial stands were variable. Additional germination and emergence in November resulted in acceptable stands. Fall growth was somewhat limited. The winter was mild except for an extremely cold spell in early November. Precipitation was above normal from October through February and below average during March and April. Cold temperatures on March 10 and April 1 resulted in considerable topkill. Heading was early. Low temperatures on May 26 (24 degrees F) resulted in severe damage to all wheat in the area. The period from late May through harvest was cool and humid. Leaf rust was present in plots prior to leaf drop, but was not considered severe. Harvest was delayed by precipitation. SRPN was harvested on July 7 and no lodging had occurred by this date. WPRPN was harvested on July 15 and had considerable lodging. Yield data was considered to be of no value due to affects of the May 26 frost.

Ft. Collins, CO -- No additional information provided.

Julesburg, CO -- No additional information provided.

Akron, CO -- There was significant differential hail damage one week prior to harvest. Yield data was not considered useful as it was related primarily to shattering resistance and relative maturity.

Walsh, CO -- No additional information provided.

Burlington, CO -- Significant differential WSMV and BYDV.

Lincoln, NE -- Leaf rust was prevalent and reduced yields to some degree. Stem rust was present, but developed too late to affect the crop. Temperatures in June were cool and there were substantial rains in late June and early July which helped to favor later maturing lines.

Clay Center, NE -- Abandoned due to excessive rains at harvest.

North Platte, NE -- Good stands and available soil moisture contributed to excellent yields. There was a late infection of leaf rust, but it did not have significant effect on yields. The May frost, which affected many areas south of North Platte, had little effect on this nursery.

Sidney, NE -- Abandoned due to poor and erratic stands in the spring.

Hemingford, NE -- The nursery was located approximately 12 miles north of Alliance and 3 miles south of Hemingford. Excellent stands were established and little winter damage occurred. Diseases were not a factor in the trial. Plant height data may have been taken prior to full plant extension.

Brookings, SD -- Abandoned.

Winner, SD -- Abandoned.

Columbia, MO -- Seeded on 10/18/91 and harvested on 7/2/92. Cold weather after planting resulted in poor fall stands, poor winter survival, and late tillering. BYDV complex affected flag leaves and heads. Lower canopy was affected by Septoria. Leaf rust was present after heading.

Crawfordsville, IA -- Nursery was abandoned.

Lind, WA -- Seeding conditions were poor and the nursery was sown deep into minimal moisture. Emergence was slow and stands were erratic. Two wind storms, which buried some plants, followed by cold temperatures near the end of October killed some plants. Fall plant development was poor. An unusually mild winter was followed by an early, warm, dry spring. Heading was two to three weeks early. June was hot and dry. Harvest was about three weeks early.

Aberdeen, ID -- No additional information provided.

Table 1. Yield and agronomic data for 45 wheats in the Southern Regional Performance Nursery in 1992.

CLOVIS (DRYL.)

NEW MEXICO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
SCOUT66	2	5167	76.9	84	111
KS84170E-8-3	24	4860	75.4	74	112
TAM-107	3	4684	75.5	69	108
TX88A6480	16	4613	75.2	68	111
T13	41	4583	74.6	66	111
T21-3	43	4276	72.4	67	111
OK89499	5	4237	73.7	69	108
NE88427	31	4186	75.8	68	111
TX88A6533	17	4019	73.1	64	108
NE88588	33	3816	77.7	71	117
NE88595	30	3799	73.9	70	110
HBC302E	25	3765	77.3	71	111
KS89H48-1	27	3741	75.6	65	109
TX88V4524	13	3725	74.7	65	105
XH1319	34	3659	74.1	75	111
KS87H325-2	26	3570	77.1	68	111
W87-018	38	3530	75.8	72	105
XH1436	35	3466	73	72	112
XH1497	37	3371	75.1	68	112
TH901	44	3369	73.6	68	111
WI88-181	39	3363	76	64	104
CO860235	20	3338	73.4	60	117
KSSB-369-7	22	3278	76.7	59	104
TX88V5433	15	3196	73.7	64	112
WI88-028	40	3175	76.4	61	104
TX87V1613	12	3168	74.6	66	104
TX89V4138	14	3166	74.9	65	105
CO870449	21	3163	73.1	65	112
N87V106	29	3154	74.7	72	106
NE88584	32	3140	74.7	67	117
T67	42	3115	72.2	66	117
CO860086	18	3099	73.9	60	112
OK89421	7	2928	76.1	62	113
TX84V1418HF	9	2860	74.9	65	112
KS831374-142	23	2718	71.4	64	106
KHARKOF	1	2707	73	73	117
XH1437	36	2615	75.2	68	114
KS89H50-4	28	2551	75.2	64	109
TH902	45	2534	72.8	64	111
OK89399	6	2432	69.8	64	114
TX88V5440	10	2425	72.2	59	111
TX88V4636	8	2386	71.8	63	113
OK88W833	4	2350	65.3	59	111
CO860094	19	2193	66.8	51	112
TX88V4635	11	1545	54.2	52	114
MEAN		3356			
LSD(.05)		1315			
C.V.		24.1			

CLOVIS (IRR.)

NEW MEXICO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
HBC302E	25	9482	76	109	118
TX88A6533	17	8254	74.9	86	113
WI88-181	39	7898	74	101	112
XH1497	37	7491	74.9	107	117
TX87V1613	12	7263	74	107	114
TAM-107	3	7232	73.2	101	116
WI88-028	40	7060	74.3	87	115
XH1436	35	6968	73.5	113	117
TX88V5433	15	6953	73.4	94	118
KSSB-369-7	22	6864	74.1	101	112
OK89399	6	6835	72.5	103	114
OK89421	7	6712	73	106	117
XH1437	36	6535	74.3	111	119
T13	41	6493	71.6	108	116
TH902	45	6409	71.8	103	113
XH1319	34	6405	73.3	111	117
KS87H325-2	26	6402	73.5	104	117
KS89H48-1	27	6260	73.3	104	116
N87V106	29	6093	74.3	106	112
TX88V5440	10	5672	72	93	117
NE88427	31	5481	73.7	103	119
KHARKOF	1	5411	74.6	113	123
TH901	44	5223	72	102	116
KS89H50-4	28	5126	73.7	108	117
W87-018	38	5039	73.4	101	112
NE88588	33	5017	75.1	105	118
CO860094	19	4914	72.7	90	119
TX88V4636	8	4906	72	100	118
TX88V4524	13	4901	74.5	95	113
KS84170E-8-3	24	4873	73.7	114	118
T67	42	4859	76.3	109	119
TX84V1418HF	9	4740	72.9	108	117
TX88V4635	11	4729	72.5	102	117
T21-3	43	4721	70.1	104	119
TX88A6480	16	4647	72.7	94	114
KS831374-142	23	4576	60.3	91	115
CO860235	20	4566	73.4	94	120
CO870449	21	4519	71.9	97	117
OK89499	5	4330	72.2	102	117
CO860086	18	4130	73.6	113	118
NE88584	32	3758	74.3	103	118
SCOUT66	2	3731	74.6	110	119
NE88595	30	3668	71.9	103	116
TX89V4138	14	3270	72.9	104	116
OK88W833	4	2969	74.3	102	114
MEAN		5631			
LSD(.05)		1667			
C.V.		18.2			

FARMINGTON

NEW MEXICO

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
NE88584	32	6241	72.2	96	126
XH1497	37	5883	72.2	94	125
C0860094	19	5689	71.9	87	128
C0870449	21	5554	73.2	87	126
T13	41	5346	73.2	86	126
SCOUT66	2	5219	72.9	107	124
XH1437	36	5112	72.2	95	126
TX89V4138	14	5043	72.9	90	124
KS87H325-2	26	4960	71.6	95	125
HBC302E	25	4954	72.2	88	126
XH1436	35	4882	71.6	90	128
TX84V1418HF	9	4799	72.6	95	125
TX87V1613	12	4795	72.6	94	124
C0860086	18	4776	72.2	86	130
KSSB-369-7	22	4539	72.9	84	124
WI88-028	40	4450	72.2	98	125
TX88A6533	17	4437	72.9	77	124
OK88W833	4	4409	71.9	88	125
TX88V4635	11	4301	71.6	86	125
NE88427	31	4252	72.2	82	125
TAM-107	3	4206	72.6	85	125
T67	42	4107	72.2	88	128
T21-3	43	4060	72.2	84	125
TH902	45	4058	71.6	95	126
XH1319	34	3997	72.9	89	125
OK89421	7	3907	72.2	94	125
OK89499	5	3905	72.2	86	130
KS84170E-8-3	24	3890	72.2	83	126
NE88595	30	3774	72.2	83	124
NE88588	33	3681	72.2	90	125
TX88V5433	15	3675	71.9	81	126
KHARKOF	1	3610	71.6	115	131
TX88A6480	16	3589	72.6	79	125
WI88-181	39	3572	73.2	77	125
OK89399	6	3562	72.9	84	128
C0860235	20	3519	71.9	82	130
W87-018	38	3428	72.2	79	124
TX88V4524	13	3376	71.9	83	125
KS831374-142	23	3369	71.9	69	126
TX88V4636	8	3325	72.9	85	126
N87V106	29	3302	71.9	87	125
KS89H48-1	27	3268	72.2	86	124
KS89H50-4	28	3103	72.9	90	125
TX88V5440	10	3064	72.2	81	125
TH901	44	3000	71.3	84	126
MEAN		4222			
LSD(.05)		1076			
C.V.		18.2			

BUSHLAND (DRYL.)

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL
OK89421	7	3497	74.4
TX88V4524	13	3470	75.7
KS84170E-8-3	24	3448	76.5
TAM-107	3	3428	76.4
KSSB-369-7	22	3371	75.3
T13	41	3345	75.3
N87V106	29	3329	74.2
TX88A6533	17	3318	76.6
TX89V4138	14	3286	76.2
XH1497	37	3275	74.3
KS87H325-2	26	3259	77.1
KS831374-142	23	3241	74.7
HBC302E	25	3235	74.8
KS89H48-1	27	3212	72.6
TX88A6480	16	3210	74.4
TX87V1613	12	3185	76.1
TX88V4636	8	3165	72.8
XH1319	34	3165	73.9
NE88427	31	3152	74.6
CO860086	18	3049	75.3
T21-3	43	3044	70.6
KS89H50-4	28	3026	74.3
TX88V5440	10	3017	73.1
WI88-181	39	3017	74
CO870449	21	3015	72.8
TH901	44	3013	74.4
WI88-028	40	2961	73.4
SCOUT66	2	2959	74.6
XH1437	36	2928	74.4
TX88V4635	11	2907	72.5
OK89399	6	2892	73.5
TX88V5433	15	2890	74.2
TX84V1418HF	9	2881	76
OK89499	5	2800	74.8
W87-018	38	2800	74.8
OK88W833	4	2757	76.1
XH1436	35	2708	72.1
NE88584	32	2661	74.9
NE88595	30	2643	72.9
CO860235	20	2629	73.1
T67	42	2457	73.9
NE88588	33	2446	76.9
TH902	45	2430	75.2
CO860094	19	2385	68.6
KHARKOF	1	1704	76.2
MEAN		2991	
LSD(.05)		650	
C.V.		13.4	

BUSHLAND (IRR.)

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	LODGING %
W87-018	38	6575	75.9	86	17
KS84170E-8-3	24	6528	77.8	89	23
KSSB-369-7	22	6436	76.8	78	47
XH1497	37	6328	75.3	92	35
OK88W833	4	6261	76.2	84	38
KS89H48-1	27	6225	74.2	94	53
TX88V4524	13	6075	74.7	80	10
HBC302E	25	6032	76.9	90	20
KS87H325-2	26	6023	74.7	88	33
XH1319	34	6023	72.9	90	42
KS831374-142	23	6012	74.9	86	40
N87V106	29	5987	75.2	93	60
NE88588	33	5907	77.8	95	45
T21-3	43	5849	74	95	38
TX88V5433	15	5784	74	81	42
TX88V4635	11	5748	72	92	35
XH1436	35	5671	72.2	93	25
TX87V1613	12	5580	75.3	91	32
TX88V4636	8	5577	72.5	89	58
WI88-181	39	5532	74.6	82	40
XH1437	36	5530	76.8	93	47
T67	42	5528	76.4	94	40
KS89H50-4	28	5521	74.4	97	47
TX88A6533	17	5506	75.5	83	18
WI88-028	40	5492	75.1	76	18
TX88A6480	16	5483	73.7	86	27
OK89421	7	5438	74.2	96	50
TX88V5440	10	5331	73	72	37
TH901	44	5319	73.7	90	57
TAM-107	3	5259	71.9	85	43
NE88584	32	5183	75.9	102	62
NE88427	31	5138	75.5	91	35
TX89V4138	14	5064	75.6	90	52
TH902	45	5006	71.5	91	47
T13	41	5001	73	91	37
OK89499	5	4999	73.1	93	25
NE88595	30	4985	72.8	94	68
TX84V1418HF	9	4974	73	89	35
CO870449	21	4936	71.9	89	53
OK89399	6	4907	72	93	33
CO860086	18	4634	70.7	85	20
SCOUT66	2	4268	73.4	106	85
CO860094	19	4129	69.3	88	25
CO860235	20	3578	71.9	88	13
KHARKOF	1	3107	75.1	110	80
MEAN		5433			
LSD(.05)		811			
C.V.		9.2			

CHILLICOTHE

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP 0-9	LEAF RUST SEV. %	LEAF RUST RESP 0-9
TX89V4138	14	5270	77.3	89	95	45*	8*	90**	8**
KSSB-369-7	22	4932	75.6	94	99	10	8	60	8
WI88-181	39	4898	79.2	85	92	20	8	90	8
OK89499	5	4764	77.6	91	101	20	8	50	8
KS89H48-1	27	4490	76.2	101	111	10	8	30	7
N87V106	29	4490	76.8	97	101	0	2	60	8
W87-018	38	4456	76	89	111	5	7	30	8
HBC302E	25	4418	77.1	95	100	10	8	80	8
TX87V1613	12	4371	77.8	96	100	10	7	50	7
KS89H50-4	28	4360	76.8	106	111	5	8	70	8
TX88V4635	11	4183	73.4	91	100	30	8	90	8
TX88V4524	13	4170	76.4	87	100	20	8	70	8
KS87H325-2	26	4154	76.9	98	101	10	8	70	8
TX88V5440	10	4116	76.5	87	100	5	7	70	8
XH1436	35	4082	75.8	95	101	20	8	80	8
OK89399	6	4060	75.6	88	99	5	8	90	8
KS831374-142	23	4035	77.7	90	101	0	2	80	8
XH1437	36	3988	77.3	106	104	.	5	60	7
XH1497	37	3986	76.5	92	104	10	8	99	8
OK88W833	4	3950	78.8	93	100	5	3	50	8
KS84170E-8-3	24	3874	77.2	71	106	10	8	30	7
T67	42	3697	78.4	99	104	5	7	80	8
TX88V4636	8	3674	73.6	88	104	20	8	90	8
XH1319	34	3672	75.8	95	99	20	8	70	8
TH901	44	3656	76	95	101	5	7	90	8
NE88584	32	3645	74.6	108	108	10	7	80	8
TX88V5433	15	3607	76.8	86	106	0	2	99	8
T21-3	43	3582	72.1	96	111	20	8	90	8
TX88A6480	16	3544	75.1	88	100	20	8	90	8
SCOUT66	2	3513	75.4	114	112	0	2	70	8
NE88588	33	3428	77.1	110	108	10	8	80	8
NE88595	30	3396	72.1	92	111	20	8	70	8
TX84V1418HF	9	3374	76.8	92	104	10	7	80	8
OK89421	7	3369	75.5	97	101	20	8	90	8
TAM-107	3	3367	74.7	89	99	60	8	99	8
TH902	45	3255	74.8	97	104	40	8	90	8
NE88427	31	3042	74	89	115	20	8	70	8
CO870449	21	3022	73.8	85	100	10	8	90	8
WI88-028	40	2932	73.4	74	108	40	8	80	8
CO860094	19	2833	75.3	86	115	30	8	10	8
CO860235	20	2670	74.1	83	115	10	8	10	8
T13	41	2638	70.6	88	111	50	7	90	8
CO860086	18	2598	71.8	80	113	30	8	70	8
TX88A6533	17	2589	73.9	80	108	60	8	90	8
KHARKOF	1	1592	78	112	.	40	8	70	8
MEAN		3728							
LSD(.05)		536							
C.V.		8.9							

* Notes taken April 4; ** Notes taken April 27

PROSPER

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP 0-9	ROOT ROT 0-5	BACTERIAL BLIGHT 0-5	MILDEW 0-9
XH1497	37	4403	74.4	101	50	8	0.3	2.3	2.3
TX88V4635	11	4270	71.7	100	60	8	2	2	1.7
TX88V4636	8	4208	72.5	101	90	8	1.3	2	2
OK89499	5	4178	74	102	60	7	0.3	2	0
KS831374-142	23	4136	75.2	99	70	8	1	1.3	2.3
TX88V5440	10	4125	75.3	98	40	7	1.3	2	2
XH1436	35	4122	72.9	101	50	8	2.3	3	4.7
XH1437	36	4057	74.8	102	60	8	0.7	1.7	1.3
TX89V4138	14	4046	75.5	99	70	8	1	2	0
TX87V1613	12	3981	74.2	97	30	7	1.7	2.3	4.3
XH1319	34	3981	73.5	99	50	8	1.3	3	3
OK88W833	4	3970	75.1	98	90	8	1	2.3	0.7
OK89421	7	3939	73.5	99	80	8	0	3	4.5
TX84V1418HF	9	3896	.	102	60	8	1	3	5
WI88-181	39	3889	74.8	91	30	3	2	4.3	6
OK89399	6	3885	73.5	99	90	8	1.7	2	0.7
KS87H325-2	26	3750	74.3	103	50	7	1	1.7	1
TX88V4524	13	3748	71	104	10	3	1.3	2.7	3.3
KS84170E-8-3	24	3741	75.5	106	10	3	1.7	1.7	0
TX88A6480	16	3730	73	98	90	8	3	3.3	5
TX88V5433	15	3717	75.5	100	40	7	1.7	2.3	0
TH901	44	3692	72.2	102	80	8	0.7	3.7	2
HBC302E	25	3609	.	101	70	8	1.7	2.3	7.3
KSSB-369-7	22	3571	68.1	97	70	8	4	4	4.3
T67	42	3488	75.2	102	30	8	1.3	2.3	3
W87-018	38	3475	72.4	110	0	.	1	2.3	2.3
TH902	45	3461	72	102	99	8	0.7	3	0
KS89H50-4	28	3445	72.8	114	40	7	0.7	1	1.7
TAM-107	3	3354	73	100	99	8	1	1.3	0
C0870449	21	3345	71.5	101	60	8	3.3	3.3	4
KS89H48-1	27	3239	72	114	20	3	0.3	1	1.7
WI88-028	40	3118	72	109	15	3	1.7	2.3	0
NE88584	32	3071	73.4	108	15	7	1	3.3	1.7
NE88595	30	3064	69.3	112	50	7	0.3	2	3.7
T21-3	43	3058	69.9	108	10	3	1	1.3	2.3
TX88A6533	17	2977	71	108	99	8	1.7	3	2.7
NE88588	33	2937	74.4	110	60	8	0.7	3.3	2.7
T13	41	2753	69	112	60	8	0	1.3	0
NE88427	31	2596	71.7	114	20	3	0	1.3	0
SCOUT66	2	2513	72	116	80	8	0.5	1.3	3.7
N87V106	29	2430	73.1	104	10	7	1.7	2.7	4
C0860086	18	2425	71.2	110	15	3	0.7	2.3	1.7
C0860094	19	2136	.	112	0	.	1	2	3.3
C0860235	20	1870	69.3	113	15	7	3	3.7	1.3
KHARKOF	1	1347	72.6	116	90	8	2.3	3	4
MEAN		3439							
LSD(.05)		776							
C.V.		13.9							

STILLWATER

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
OK89499	5	2785	74.2	68	115
W87-018	38	2534	72.9	73	118
KS84170E-8-3	24	2532	74.7	80	116
OK89399	6	2530	71.5	73	110
KS89H50-4	28	2426	73.4	87	119
OK88W833	4	2358	73.5	72	109
OK89421	7	2288	74.3	72	110
TX88V5433	15	2279	73.5	70	112
TX89V4138	14	2260	72.5	73	111
KS831374-142	23	2252	73.4	68	109
NE88584	32	2245	73.8	82	116
XH1437	36	2226	73.4	80	111
KS89H48-1	27	2218	71.7	85	120
T21-3	43	2217	72.2	80	117
N87V106	29	2208	71.9	78	115
TX87V1613	12	2193	73.8	77	111
XH1436	35	2168	70.4	75	113
TX88V5440	10	2157	72.4	68	109
TH901	44	2147	70.7	73	110
XH1497	37	2139	72	75	110
T67	42	2061	73.5	75	114
TX88V4635	11	2057	71.3	70	111
WI88-028	40	2021	71.3	65	121
TX84V1418HF	9	1996	73.7	75	112
WI88-181	39	1987	71.9	63	108
XH1319	34	1946	69.1	75	110
TH902	45	1910	70.2	77	109
NE88588	33	1888	75.9	80	118
TX88A6480	16	1867	71.7	68	111
KS87H325-2	26	1845	72.9	72	109
TX88V4636	8	1795	71.1	70	112
HBC302E	25	1734	73	70	112
NE88595	30	1684	70.6	75	122
KSSB-369-7	22	1666	67.6	70	108
TX88V4524	13	1657	73.5	68	115
SCOUT66	2	1610	74.6	88	.
TX88A6533	17	1589	69.7	65	122
NE88427	31	1576	72.9	72	.
CO860086	18	1553	69.7	68	122
CO870449	21	1517	68.6	72	114
TAM-107	3	1191	67.3	63	110
T13	41	1133	67.6	70	122
CO860094	19	1090	68.9	63	.
KHARKOF	1	1033	73.8	88	.
CO860235	20	943	71.6	67	.
MEAN		1945			
LSD(.05)		322			
C.V.		10.2			

LAHOMA

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
TX88V5433	15	4215	73.3	87
XH1436	35	3679	68.8	92
T21-3	43	3512	65.8	77
KS89H48-1	27	3475	71.7	98
KS87H325-2	26	3303	73.4	90
TX88V5440	10	3262	70.4	83
TX88V4524	13	3252	71	85
TX88V4635	11	3159	68.1	93
KS89H50-4	28	3135	68.9	93
NE88427	31	3105	68.1	88
XH1497	37	3086	68.9	95
KS831374-142	23	3027	69.9	80
TX88V4636	8	2920	67.2	80
NE88595	30	2877	68.2	98
OK89499	5	2864	67.9	85
WI88-028	40	2801	65.4	77
XH1437	36	2776	70	98
KS84170E-8-3	24	2747	70	88
OK89421	7	2632	70.3	92
HBC302E	25	2623	70.3	87
CO860086	18	2593	62.8	87
OK88W833	4	2576	71.3	78
TX88A6533	17	2564	68.1	82
TX84V1418HF	9	2557	70	88
CO870449	21	2531	65.5	83
T67	42	2517	68.8	85
OK89399	6	2496	68.2	80
TX88A6480	16	2454	66	88
W87-018	38	2417	64.4	82
XH1319	34	2408	66.2	88
KSSB-369-7	22	2386	65.8	85
WI88-181	39	2367	68.2	80
T13	41	2356	65	82
TH901	44	2313	64	85
NE88588	33	2105	68.1	97
CO860094	19	2043	60.9	85
TH902	45	2035	64.2	92
TAM-107	3	1886	64.8	84
CO860235	20	1804	61	83
TX89V4138	14	1783	65.9	78
N87V106	29	1749	60.1	85
TX87V1613	12	1514	63.3	87
NE88584	32	1514	61.3	90
KHARKOF	1	1139	68	93
SCOUT66	2	967	65.9	77
MEAN		2567		
LSD(.05)		556		
C.V.		13.3		

ALTUS

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
N87V106	29	2375	74.6	73
KS831374-142	23	2348	75.1	78
KS89H48-1	27	2347	73.8	75
KS89H50-4	28	2318	73.8	75
W87-018	38	2318	73.3	70
KS84170E-8-3	24	2252	77	75
KS87H325-2	26	2236	75.9	75
TX88V4635	11	2168	74.4	72
OK88W833	4	2157	77	75
TX88V5433	15	2132	75.2	77
OK89499	5	2121	75.2	70
TX88V5440	10	2091	73.9	75
TX88V4636	8	2077	74.6	70
KSSB-369-7	22	2075	73.1	72
WI88-028	40	2072	71.7	63
OK89421	7	2070	75.3	77
HBC302E	25	2042	74.3	73
XH1436	35	2022	73.5	75
XH1437	36	2014	76.4	78
TX88A6533	17	2005	75.9	62
NE88584	32	1978	75.5	78
WI88-181	39	1931	73.8	68
TX88A6480	16	1929	72.9	72
XH1497	37	1907	74.2	73
TX87V1613	12	1906	73.9	78
TX88V4524	13	1890	75.7	70
TX89V4138	14	1852	75.6	70
NE88595	30	1843	75.1	63
OK89399	6	1832	74.7	68
T21-3	43	1764	71.3	75
T67	42	1750	77.4	73
NE88427	31	1730	76.9	67
TH901	44	1694	72.2	75
TX84V1418HF	9	1673	77.5	78
C0860086	18	1645	71.1	62
NE88588	33	1606	78.9	75
XH1319	34	1593	73.9	77
C0870449	21	1548	72.2	68
TH902	45	1544	72.4	77
T13	41	1539	72.6	63
TAM-107	3	1534	72	68
C0860094	19	1472	74.3	53
SCOUT66	2	1066	77	77
C0860235	20	664	74.9	53
KHARKOF	1	618	71.1	77
MEAN		1861		
LSD(.05)		280		
C.V.		9.2		

GOODWELL

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL
XH1436	35	7313	73.9
KSSB-369-7	22	7302	76.4
T21-3	43	7072	73
WI88-181	39	7062	76
TX88V4524	13	7052	74.2
XH1437	36	7043	75.5
HBC302E	25	7022	74.3
TX88A6533	17	6978	73.9
TH902	45	6978	72.4
CO870449	21	6884	73.9
KS89H48-1	27	6884	74.7
TX88A6480	16	6872	73.7
KS84170E-8-3	24	6845	75.1
TH901	44	6829	74.3
XH1497	37	6828	75.6
W87-018	38	6807	73.7
KS831374-142	23	6783	75.9
TX88V4636	8	6751	72.4
TX89V4138	14	6733	75.3
OK89499	5	6624	74.4
XH1319	34	6583	74
TX88V5433	15	6574	75.1
KS89H50-4	28	6506	74.6
TX88V4635	11	6477	73
KS87H325-2	26	6465	76.1
TX87V1613	12	6436	73.9
NE88595	30	6422	72.2
OK89399	6	6407	74.2
TX88V5440	10	6373	74.7
OK88W833	4	6350	77.1
WI88-028	40	6309	73.3
OK89421	7	6301	74.9
TX84V1418HF	9	6185	75.1
NE88588	33	6173	76
T13	41	6085	72.5
CO860094	19	6040	71.7
NE88427	31	6017	73.5
TAM-107	3	5905	74.2
N87V106	29	5870	75.3
CO860086	18	5701	69.9
CO860235	20	5670	73.5
T67	42	5209	77.3
NE88584	32	5159	74.6
SCOUT66	2	5028	75.3
KHARKOF	1	3435	74.3
MEAN		6408	
LSD(.05)		827	
C.V.		7.9	

HUTCHINSON

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING %	LEAF RUST: SEV. %	LEAF RUST: RESP 0-9	SEPTORIA NODORUM 0-9	GREEN LEAF DURATION 0-9
KS831374-142	23	3024	72.5	77	122	0	40	8	4.3	4.7
N87V106	29	2811	71	81	125	0	1	3	4.7	6
T67	42	2715	74.7	85	126	0	80	8	3.7	8
KS84170E-8-3	24	2685	72.2	79	127	0	1	8	7	5
KS89H50-4	28	2658	72.3	86	128	0	60	8	3.7	7
TX88V5433	15	2611	73.5	77	125	0	30	8	4.3	5
KS87H325-2	26	2537	75.1	81	122	0	60	8	4	8.3
OK88W833	4	2385	70	73	121	0	100	8	4	9
T21-3	43	2266	71.9	85	127	13	80	8	4.7	9
OK89499	5	2220	70.1	77	129	0	40	8	4	5.7
TX84V1418HF	9	2211	72.8	79	126	0	70	8	4.7	9
W87-018	38	2206	71.4	72	126	0	100	8	5	6.7
KS89H48-1	27	2200	68.8	87	127	0	60	8	4.3	6
NE88584	32	2126	70	97	127	10	100	8	5	8
TX88V5440	10	2119	71.8	74	125	0	30	8	5	6.3
XH1436	35	2119	68.5	77	125	0	100	8	4.3	7.7
WI88-181	39	2056	72	71	123	0	100	8	4.7	9
HBC302E	25	1972	67.1	69	126	0	40	8	3.3	7.7
KSSB-369-7	22	1938	73.1	72	122	0	20	8	6	8.3
TX88V4524	13	1773	72.4	67	126	0	40	8	5	8.7
OK89421	7	1718	68.5	79	126	3	100	8	4.7	9
NE88588	33	1713	75	87	129	0	100	8	5.7	9
OK89399	6	1670	69.9	73	126	0	80	8	6.3	9
TH901	44	1665	71.9	82	125	0	100	8	5.7	9
XH1437	36	1645	71.3	85	126	3	100	8	6	9
TH902	45	1569	70.8	80	126	0	100	8	5.3	9
TX87V1613	12	1516	68	80	127	0	20	8	6.7	9
NE88427	31	1485	69.7	77	130	0	100	8	6	7.7
TX89V4138	14	1443	70.3	71	126	0	80	8	7	9
XH1497	37	1423	69.9	78	123	7	100	8	5.7	8.7
TX88A6480	16	1349	62.6	65	124	0	100	8	6.7	9
TX88A6533	17	1346	67.1	71	128	3	100	8	6	9
NE88595	30	1253	67.4	81	130	7	100	8	5.7	8
XH1319	34	1240	64	81	124	0	100	8	5	9
SCOUT66	2	1125	57.5	102	131	27	100	8	6	8.7
WI88-028	40	1104	65.1	64	129	0	80	8	8.3	9
C0870449	21	1040	66	75	125	0	100	8	7.7	9
TX88V4635	11	1021	62.5	74	127	3	80	8	5.3	9
TX88V4636	8	915	68	73	128	3	100	8	7	8.7
TAM-107	3	812	66.9	68	122	0	100	8	7.3	9
KHARKOF	1	809	66	111	131	63	100	8	6.3	7.7
T13	41	790	59.5	74	128	3	100	8	7.7	9
C0860235	20	651	59.3	73	130	0	90	8	6.7	7
C0860094	19	584	.	78	132	3	50	8	5.7	6.7
C0860086	18	373	.	66	130	3	100	8	7	7.3
MEAN		1709								
LSD(.05)		440								
C.V.		15.9								

MANHATTAN

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	RESP. 0-9	GREEN LEAF DURATION 0-9
KS84170E-8-3	24	3601	58	81	131	5	7	3
KS831374-142	23	3356	59.1	80	129	15	8	3.5
N87V106	29	3061	71.9	84	130	6	5	4.5
TX88V5433	15	2854	69.8	82	129	45	8	4.5
HBC302E	25	2849	56.3	74	130	80	8	6.5
WI88-181	39	2843	68	70	128	80	8	7.5
KS89H48-1	27	2789	65.1	91	133	70	8	6.5
OK89421	7	2772	62.1	81	129	80	8	7
KS89H50-4	28	2772	66.2	96	133	70	8	6.5
T67	42	2763	60.9	81	130	80	8	6.5
KS87H325-2	26	2756	73.5	75	128	70	8	6.5
TX88V5440	10	2741	68.5	75	128	15	8	5
XH1436	35	2733	58.8	81	130	60	8	5
TX84V1418HF	9	2713	68.6	82	129	60	8	7
OK89499	5	2672	69.8	78	131	35	8	6
XH1437	36	2543	51.5	88	130	70	8	7
CO870449	21	2527	53.3	79	131	70	8	6.5
TX87V1613	12	2488	53.6	80	130	50	8	5.5
TX88V4635	11	2429	50.5	76	130	80	8	7.5
XH1497	37	2397	64	80	129	90	8	6.5
TH901	44	2383	69.5	83	130	70	8	7
T21-3	43	2380	67.7	89	132	80	8	7.5
W87-018	38	2343	69.9	78	132	8	5	5.5
NE88584	32	2323	68.8	94	131	80	8	5.5
WI88-028	40	2288	54.4	71	134	60	8	7
TX88V4524	13	2283	65.9	63	132	45	8	5.5
NE88588	33	2275	62.6	91	132	70	8	8
TX88V4636	8	2189	49.4	76	131	90	8	8.5
NE88595	30	2174	65.9	89	132	80	8	8.5
NE88427	31	2158	60.9	86	136	90	8	8.5
OK89399	6	2154	64.7	77	130	80	8	8
KSSB-369-7	22	2139	69.6	69	127	60	8	7
OK88W833	4	2035	71.1	71	129	90	8	9
TX88A6533	17	1916	58.1	74	133	80	8	7.5
TX88A6480	16	1880	53.7	67	130	90	8	8
TH902	45	1809	70.5	80	129	90	8	9
XH1319	34	1784	63.3	79	130	80	8	7
TX89V4138	14	1782	63.3	69	131	80	8	9
CO860235	20	1686	60.7	72	141	60	8	6.5
T13	41	1686	60.6	86	133	100	8	9
TAM-107	3	1649	65.7	77	129	100	8	9
CO860094	19	1631	57	76	139	20	8	4.5
SCOUT66	2	924	62.4	97	134	90	8	8
CO860086	18	765	35	69	138	80	8	8.5
KHARKOF	1	665	29	86	142	80	8	7

MEAN	2288
LSD(.05)	778
C.V.	20.9

HAYS

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	FREEZE DAMAGE 0-5
N87V106	29	4194	80.5	75	126	3.7
T21-3	43	4174	79.2	78	126	1.7
NE88595	30	3988	79.4	73	127	3
NE88427	31	3977	80.3	71	128	1
KS89H48-1	27	3934	79.5	70	127	2.3
XH1497	37	3903	80.7	78	124	3.7
XH1319	34	3894	78.9	78	125	3
T13	41	3894	79.5	70	127	2.3
XH1437	36	3858	81.4	75	126	4
TX89V4138	14	3829	80.1	68	126	4.7
OK89421	7	3777	80.7	72	126	3
TH902	45	3746	79.9	76	125	3.7
TX88A6533	17	3688	79.6	64	127	1.7
W87-018	38	3676	79.4	68	126	2.7
TX88V4636	8	3645	78.1	68	128	3.3
KS89H50-4	28	3605	79.8	77	126	3
XH1436	35	3602	76.6	73	126	2
TX88A6480	16	3540	79.9	68	125	4
HBC302E	25	3528	80.8	72	126	4.3
NE88584	32	3528	79.1	82	127	4
TX88V5433	15	3524	77.3	62	128	3.7
TAM-107	3	3499	79.9	67	124	3
KS84170E-8-3	24	3452	80.8	68	126	2
TH901	44	3425	79.6	75	125	4
NE88588	33	3398	80.2	75	129	1.7
WI88-181	39	3389	81.2	64	124	3.7
T67	42	3387	80.1	76	127	4.3
OK89499	5	3354	79.4	64	129	4.3
SCOUT66	2	3302	79.6	81	129	3
TX87V1613	12	3286	79.7	72	128	4
OK89399	6	3266	79.1	69	127	4.3
C0870449	21	3239	78.2	70	128	4
TX84V1418HF	9	3120	79.4	70	127	3
OK88W833	4	3098	81.1	69	125	3
KS831374-142	23	3091	78.7	71	123	3
C0860086	18	3078	74.8	64	131	2.7
KSSB-369-7	22	3060	80.8	64	124	4.3
WI88-028	40	3017	79.7	57	129	4.7
C0860094	19	2959	74.4	65	132	2.7
TX88V4635	11	2892	79.2	71	125	2.7
TX88V4524	13	2890	79.9	60	127	4.7
C0860235	20	2874	73.1	66	132	1.7
TX88V5440	10	2842	77.9	68	124	3
KHARKOF	1	2603	72.6	95	132	2.3
KS87H325-2	26	2582	79.2	72	124	3.7
MEAN		3436				
LSD(.05)		475				
C.V.		8.5				

GARDEN CITY

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
XH1497	37	2618	74.6	61	129
OK89421	7	2562	75.6	62	129
KS831374-142	23	2524	73.3	62	128
KS89H48-1	27	2468	75.2	64	130
NE88584	32	2446	73.6	70	132
KS89H50-4	28	2374	75.2	65	130
NE88595	30	2369	72.8	61	133
TX88A6480	16	2349	73.7	58	129
TX89V4138	14	2300	74.6	64	132
TAM-107	3	2287	73.2	56	129
NE88427	31	2269	73.1	59	132
TX88V5433	15	2260	72.4	61	128
XH1436	35	2242	72	62	131
T67	42	2217	74.8	64	130
CO860086	18	2199	69.1	58	135
TX88A6533	17	2195	75.6	58	133
TX88V4636	8	2192	73.1	60	131
XH1437	36	2179	75.3	65	131
TH901	44	2177	73.8	63	129
T13	41	2174	71	58	133
NE88588	33	2168	75.5	68	131
SCOUT66	2	2141	73.2	71	133
KS87H325-2	26	2123	74.9	59	129
OK89499	5	2118	73.2	54	134
TX88V4635	11	2118	72.2	60	131
XH1319	34	2118	73.2	64	130
OK88W833	4	2112	73	57	129
CO870449	21	2042	71.5	61	132
HBC302E	25	1979	75.1	62	132
T21-3	43	1970	69.1	67	130
KSSB-369-7	22	1966	74.1	58	130
OK89399	6	1961	71.5	53	131
TX88V5440	10	1901	71.4	59	128
TX88V4524	13	1890	75.3	56	131
TX87V1613	12	1876	73.9	63	130
KS84170E-8-3	24	1872	74.1	61	133
TH902	45	1849	73.1	63	129
CO860235	20	1847	67	59	136
TX84V1418HF	9	1827	73.3	61	129
W87-018	38	1766	72.1	52	132
CO860094	19	1715	64.2	59	137
N87V106	29	1701	72	58	133
WI88-181	39	1636	74	54	131
WI88-028	40	1553	69.9	48	136
KHARKOF	1	1332	65.4	73	138

MEAN	2089
LSD(.05)	375
C.V.	11.1

COLBY

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD* KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
T13	41	2425*	72.2	76	130
XH1497	37	2289	68.8	80	128
OK88W833	4	2230	66.4	76	127
NE88427	31	2132	68.7	76	131
TAM-107	3	2038	63	77	127
CO860086	18	2011	71	68	133
KHARKOF	1	1984	76.7	102	137
W87-018	38	1932	62.3	73	127
TX89V4138	14	1928	71.9	74	129
KS89H50-4	28	1903	68.7	79	130
TH901	44	1883	60.9	81	128
KS89H48-1	27	1879	62	75	130
OK89421	7	1865	64.5	79	130
NE88588	33	1861	64.3	85	131
NE88595	30	1834	68.3	78	131
XH1437	36	1825	69.8	86	130
WI88-181	39	1814	60.8	69	128
NE88584	32	1733	63.8	86	131
TX88V4524	13	1722	56	70	128
SCOUT66	2	1704	76.2	95	132
KS831374-142	23	1681	59.4	74	127
TX88V5440	10	1657	55.8	72	127
TX88V4636	8	1632	67.8	75	132
TX88V5433	15	1610	55.2	71	128
XH1319	34	1583	62.7	82	129
XH1436	35	1576	61.3	79	130
TH902	45	1556	57.8	83	128
N87V106	29	1533	56.8	80	129
TX88V4635	11	1511	65.7	73	132
TX88A6533	17	1502	60.2	69	130
KS84170E-8-3	24	1417	58.2	80	129
OK89499	5	1410	66.1	69	132
CO870449	21	1408	57.1	75	131
TX88A6480	16	1374	51.1	69	129
OK89399	6	1367	64.2	79	131
T21-3	43	1363	60.3	80	128
KS87H325-2	26	1338	59	75	128
T67	42	1246	57.6	85	130
CO860094	19	1222	71.1	74	135
HBC302E	25	1175	60.8	73	131
TX84V1418HF	9	1114	54.1	80	130
CO860235	20	1047	65.8	69	134
TX87V1613	12	1031	60.2	79	130
KSSB-369-7	22	908	54.8	69	130
WI88-028	40	890	68.8	65	132
MEAN		1625			
LSD(.05)		388			
C.V.		14.7			

* Severe freeze damage affected grain yields.

FORT COLLINS

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1
TX88A6480	16	12425	74.8	138
TX88V4524	13	11928	77.9	137
TAM-107	3	11443	75.4	136
KSSB-369-7	22	11431	77.2	136
HBC302E	25	11263	75.5	140
T13	41	11263	75	140
TX88A6533	17	11047	78	139
XH1437	36	10860	77.4	139
T21-3	43	10838	73.5	140
OK89499	5	10666	74.5	142
OK89421	7	10461	76	138
OK89399	6	10427	75.3	140
WI88-181	39	10427	76.7	137
TX87V1613	12	10338	76.8	139
XH1436	35	10323	74.2	140
XH1497	37	10282	75.8	138
W87-018	38	10278	75.6	137
KS84170E-8-3	24	10226	77	140
TAM-200	46	10185	77.5	140
T67	42	10114	76.4	142
OK88W833	4	10054	78.2	137
NE88427	31	10046	74.8	141
CO860086	18	9912	74	144
KS89H48-1	27	9744	75.4	138
TH902	45	9718	73.6	138
XH1319	34	9707	75.9	139
TX88V5440	10	9636	74.6	139
TX84V1418HF	9	9613	76.7	140
TH901	44	9550	73	138
CO870449	21	9531	75.3	139
TX89V4138	14	9486	73.9	138
MV16-85	50	9430	74.4	141
TX88V4635	11	9401	75.8	136
TX88V5433	15	9307	72.4	141
WI88-028	40	9307	77.3	139
KSWGRC10	49	9121	75.6	137
CO860094	19	8938	74.1	145
SANDY	47	8919	76.3	145
NE88595	30	8878	75.5	140
KS831374-142	23	8564	74.3	136
NE88588	33	8501	77	139
N87V106	29	8463	74.5	135
KS87H325-2	26	8407	74.9	136
CO860235	20	8266	73.2	144
NE88584	32	8262	75.9	140
TX88V4636	8	7971	72.6	142
KS89H50-4	28	7922	75.5	138
CO840186	48	7668	75.2	141
SCOUT66	2	6970	74.5	140
KHARKOF	1	5372	74.2	147
MEAN		9658		
LSD(.05)		1937		
C.V.		12.3		

JULESBURG

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	WINTER SURVIVAL %
CO860094	19	3243	70.3	76	80
SANDY	47	2870	76.4	84	90
CO860235	20	2619	69.6	76	60
TX88V4524	13	2560	76.1	66	80
NE88595	30	2517	77.4	81	80
TX88A6533	17	2338	76.4	69	80
NE88584	32	2280	76.8	81	80
NE88427	31	2274	77.7	71	80
T13	41	2272	77.4	74	80
KS84170E-8-3	24	2253	75.8	66	80
OK89399	6	2243	75.2	76	80
XH1436	35	2230	75.8	76	80
SCOUT66	2	2221	77.4	91	80
OK89499	5	2185	78.3	71	80
KHARKOF	1	2184	72.1	112	80
KS89H48-1	27	2183	74.9	76	80
XH1319	34	2169	74.9	81	80
TAM-107	3	2151	80.8	71	80
XH1497	37	2144	78	76	80
TAM-200	46	2100	78.9	69	60
TX88A6480	16	2091	77.7	69	80
XH1437	36	2090	78.3	86	80
KS89H50-4	28	2070	78.3	79	80
OK89421	7	2053	79.5	76	80
NE88588	33	2026	79.2	79	80
W87-018	38	2017	78.3	71	80
OK88W833	4	2012	78	76	80
KSWGRC10	49	2010	78.9	76	90
KS87H325-2	26	1837	77.4	76	80
T21-3	43	1832	77.4	79	80
TX88V5433	15	1823	76.1	76	50
CO860086	18	1785	73.7	71	80
TX88V5440	10	1773	73.3	71	80
KS831374-142	23	1720	75.5	71	80
TH902	45	1717	77.4	76	80
TX87V1613	12	1675	77.7	76	80
TH901	44	1661	76.8	71	80
KSSB-369-7	22	1625	79.2	64	50
WI88-028	40	1622	69.6	69	50
CO870449	21	1621	76.8	76	50
HBC302E	25	1608	73.3	71	80
TX88V4636	8	1575	73	71	80
T67	42	1519	77.4	81	80
N87V106	29	1504	77.1	76	80
TX89V4138	14	1490	76.8	71	80
WI88-181	39	1344	78.9	66	50
TX88V4635	11	1315	79.2	66	80
TX84V1418HF	9	1264	78.9	76	80
MV16-85	50	1210	62.2	61	10
CO840186	48	612	.	66	5
MEAN		1951			
LSD(.05)		533			
C.V.		16.8			

AKRON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD* KG/HA	VOLUME WEIGHT KG/HL
TX89V4138	14	2972*	80.7
T13	41	2943	78.2
CO860094	19	2612	79.2
CO860086	18	2589	79.2
TAM-107	3	2489	78.9
WI88-028	40	2432	81.1
TAM-200	46	2398	81.4
KSWGRC10	49	2344	79.5
TX88A6533	17	2242	78
TX88A6480	16	2177	78.7
XH1497	37	2121	79.7
MV16-85	50	2121	75.7
KS84170E-8-3	24	2114	78.8
SANDY	47	2107	80.3
T21-3	43	1959	77.4
OK89421	7	1876	79.3
HBC302E	25	1813	78.3
KS89H48-1	27	1804	76.6
XH1319	34	1799	78.2
CO840186	48	1737	79.7
TX88V4636	8	1726	77.7
CO860235	20	1712	77
W87-018	38	1700	79.2
XH1436	35	1678	78.7
KHARKOF	1	1658	77.1
WI88-181	39	1647	80.9
KS831374-142	23	1608	76.6
KSSB-369-7	22	1607	81.7
OK89399	6	1589	75.5
TX88V4635	11	1585	76.1
KS87H325-2	26	1542	78
OK89499	5	1521	78
SCOUT66	2	1511	79.4
NE88427	31	1478	78.8
OK88W833	4	1457	79.9
TX88V5440	10	1455	75.1
KS89H50-4	28	1428	76.6
TX84V1418HF	9	1389	78.8
T67	42	1348	78.6
TH902	45	1343	78.7
XH1437	36	1299	80.5
TX87V1613	12	1265	79.3
TX88V4524	13	1236	78.5
N87V106	29	1198	79.5
TX88V5433	15	1195	75.7
NE88595	30	1192	80
CO870449	21	1178	79.7
NE88584	32	1057	79.1
NE88588	33	1048	79.9
TH901	44	839	77.7
MEAN		1743	
LSD(.05)		535	
C.V.		18.9	

* Significant hail damage prior to harvest.

WALSH

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL
T13	41	1795	76.9
TX88A6533	17	1794	76.8
CO870449	21	1737	75.1
XH1497	37	1690	76.6
NE88595	30	1687	73.8
OK89421	7	1686	76.2
SANDY	47	1678	76.4
TX88V4524	13	1634	79.2
CO860094	19	1631	75
NE88584	32	1619	75.1
CO860086	18	1610	76
KSWGRC10	49	1606	74.6
TAM-107	3	1561	76.1
TAM-200	46	1557	78.9
KS89H48-1	27	1535	75.9
NE88427	31	1506	76.8
SCOUT66	2	1474	76.4
TX87V1613	12	1454	76
T67	42	1430	77.8
NE88588	33	1429	77.1
TX88V4636	8	1416	74.4
KSSB-369-7	22	1410	76.1
T21-3	43	1405	75.3
KS89H50-4	28	1380	76.3
KS87H325-2	26	1366	75.9
XH1437	36	1366	76.8
HBC302E	25	1332	77.5
KHARKOF	1	1304	76.9
TH902	45	1302	75.7
OK88W833	4	1298	77.3
XH1436	35	1296	75.4
KS831374-142	23	1293	75.2
TX88A6480	16	1292	74.6
CO860235	20	1292	75.2
TH901	44	1262	75.9
TX84V1418HF	9	1254	76.7
TX89V4138	14	1246	74
TX88V5440	10	1213	74.6
OK89499	5	1212	76.2
OK89399	6	1196	74.9
TX88V5433	15	1195	74.5
KS84170E-8-3	24	1186	75.6
XH1319	34	1185	75.4
TX88V4635	11	1129	74.4
W87-018	38	1109	75.4
N87V106	29	1098	75.2
MV16-85	50	1088	73
CO840186	48	1074	78.4
WI88-181	39	969	77
WI88-028	40	848	79.4
MEAN		1383	
LSD(.05)		285	
C.V.		12.7	

LINCOLN

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEVERITY 0-9
KS89H50-4	28	4869	77.1	89	139	5
T21-3	43	4606	74.4	75	140	6
KS84170E-8-3	24	4587	77.1	77	140	2.5
KS89H48-1	27	4559	77.1	85	139	4
NE88595	30	4482	73	84	142	8.5
CO860094	19	4351	76.4	81	150	3
KS831374-142	23	4318	77.4	71	137	3.5
NE88584	32	4288	77.3	85	141	6
XH1497	37	4269	75.5	75	138	8.5
TX88V5440	10	4248	75.1	69	137	4
N87V106	29	4224	.	77	140	1.5
TX88V5433	15	4217	76	74	138	3
NE88427	31	4174	76.8	85	144	7.5
T13	41	4102	71.9	79	140	9
KS87H325-2	26	4028	75.6	72	138	6.5
T67	42	4025	79.1	80	140	6
W87-018	38	4022	76.5	70	142	5
XH1436	35	3933	73.4	77	139	5
TX88A6533	17	3881	74.4	70	140	9
TX84V1418HF	9	3850	76.5	79	139	5.5
TH901	44	3831	73.5	75	139	6
OK89421	7	3812	75.9	76	139	8.5
CO860235	20	3791	75.1	79	143	6
XH1437	36	3788	77.5	88	140	6
TH902	45	3679	73.7	80	140	9
OK89499	5	3676	76.9	72	142	3.5
OK89399	6	3617	76.9	77	139	7.5
OK88W833	4	3609	77.3	67	137	8.5
TAM-107	3	3586	72.8	72	137	9
NE88588	33	3583	78.2	81	141	7.5
TX88V4635	11	3499	74.4	75	141	8
TX88A6480	16	3315	73.5	64	139	7.5
SCOUT66	2	3277	77.1	95	142	8
CO860086	18	3239	75.6	76	147	9
TX88V4524	13	3210	77.7	64	140	2
XH1319	34	2998	73.8	74	139	8
TX89V4138	14	2995	76	72	143	7.5
CO870449	21	2883	73.7	72	143	7
TX87V1613	12	2877	76.9	76	143	2.5
TX88V4636	8	2779	75.1	75	142	9
KHARKOF	1	2732	76.1	100	152	7
HBC302E	25	2608	.	71	144	4
WI88-181	39	1954	75.7	57	140	6.5
WI88-028	40	1909	75.6	60	146	5
KSSB-369-7	22	1562	76.6	60	142	4.5
MEAN		3641				
LSD(.05)		995				
C.V.		16.8				

NORTH PLATTE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
HBC302E	25	5884	79.5	88
N87V106	29	5882	79.2	95
T67	42	5435	80.1	95
T21-3	43	5284	76.5	93
KSSB-369-7	22	5278	80.5	89
TX84V1418HF	9	5222	78.3	90
XH1437	36	5154	80.2	90
TH902	45	5117	77.4	94
KS831374-142	23	5067	77.7	89
XH1497	37	5015	80	91
OK89421	7	4973	79.5	94
TH901	44	4972	77.1	94
OK88W833	4	4873	80.4	86
NE88595	30	4768	78.8	89
KS89H48-1	27	4651	78.7	89
W87-018	38	4639	79.5	80
TX88A6533	17	4588	79.7	75
KS84170E-8-3	24	4540	80.2	93
TX88A6480	16	4534	78.6	79
NE88588	33	4534	80.5	108
TAM-107	3	4530	78.7	86
TX88V4636	8	4505	77.9	89
WI88-181	39	4486	81	79
NE88427	31	4398	79.3	88
XH1436	35	4367	77.5	84
TX88V5433	15	4354	78.2	83
TX87V1613	12	4330	80	86
OK89399	6	4329	77.9	91
TX88V4524	13	4325	79.5	77
TX89V4138	14	4120	81	83
OK89499	5	4117	79.5	83
NE88584	32	3969	77.7	105
TX88V4635	11	3959	78.7	86
XH1319	34	3817	76.9	79
KS87H325-2	26	3795	78.3	93
KS89H50-4	28	3739	78.4	90
T13	41	3733	78.7	86
CO870449	21	3561	79.2	83
TX88V5440	10	3475	76.5	77
CO860086	18	3408	80	72
SCOUT66	2	3248	80.6	109
KHARKOF	1	2640	80.9	116
WI88-028	40	2561	80.9	67
CO860094	19	2251	82.4	88
CO860235	20	1679	77.5	81
MEAN		4314		
LSD(.05)		1126		
C.V.		16.1		

HEMINGFORD

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
TX89V4138	14	3842	82.2	58
C0860235	20	3740	79.3	55
NE88584	32	3674	77.7	65
XH1437	36	3672	80.1	66
C0860094	19	3585	79.9	55
KHARKOF	1	3560	81.1	70
NE88595	30	3520	79.9	64
XH1497	37	3415	79.5	61
T13	41	3369	79.5	53
NE88427	31	3344	81.7	62
OK89421	7	3316	78.9	61
SCOUT66	2	3311	80.1	69
TAM-107	3	3292	78.8	56
TX87V1613	12	3282	81.3	61
T67	42	3234	80.2	65
C0860086	18	3227	82	57
TX88V4636	8	3184	79.1	55
TX88V4635	11	3156	79.5	57
HBC302E	25	3107	79.5	58
NE88588	33	3031	82	64
OK89399	6	3030	79.2	61
XH1436	35	3028	78.7	60
C0870449	21	3021	78.9	57
TX88A6533	17	2987	79.2	53
W87-018	38	2953	78.9	52
N87V106	29	2869	78	62
OK89499	5	2833	80.6	60
TX84V1418HF	9	2826	80.2	61
OK88W833	4	2819	79.6	57
T21-3	43	2813	77.3	60
KS84170E-8-3	24	2806	77.4	60
KS89H50-4	28	2750	77.4	61
TX88A6480	16	2730	76.6	51
XH1319	34	2693	78.8	69
KSSB-369-7	22	2578	79.5	53
TH901	44	2516	77.1	64
TX88V5433	15	2456	77.4	52
TX88V4524	13	2377	78.7	52
KS831374-142	23	2365	74.6	53
KS89H48-1	27	2273	.	60
TH902	45	2271	77.4	62
WI88-181	39	2224	81	51
TX88V5440	10	2196	74.8	55
KS87H325-2	26	2027	76.9	56
WI88-028	40	1819	80	48

MEAN	2958
LSD(.05)	556
C.V.	11.6

COLUMBIA

MISSOURI

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-9	WINTER SURVIVAL %	BYD VIRUS %
KS89H48-1	27	4255	77.5	91	138	2	78	13
OK89499	5	4150	74.8	81	138	2	38	15
TX88A6533	17	4109	77.8	75	138	1	73	18
CO860094	19	3950	73.3	87	140	2	80	18
OK89421	7	3810	76.2	81	134	2.3	65	23
CARDINAL	47	3803	70.2	87	140	1.7	43	12
T21-3	43	3797	76.8	88	137	3.3	65	18
T13	41	3775	76.2	80	137	1.7	78	18
2163	48	3770	70.9	75	134	2	68	28
N87V106	29	3729	75.4	84	137	2	62	12
KS831374-142	23	3687	76.7	75	132	2.3	60	20
KS89H50-4	28	3668	77.5	91	138	2	63	20
NE88595	30	3651	72	87	139	1.7	40	18
OK88W833	4	3645	76.2	76	135	2	50	23
CO860235	20	3622	70.8	86	140	1.3	75	20
CO870449	21	3586	74.4	77	138	2	60	17
NE88584	32	3562	75.5	100	138	2.3	72	30
XH1497	37	3549	75.3	80	135	2	53	25
OK89399	6	3538	74.9	85	138	2.7	38	23
W87-018	38	3523	74.9	77	138	2	65	27
TAM-107	3	3520	74.8	77	134	2.3	62	38
NE88427	31	3509	77	85	138	1.7	60	15
XH1437	36	3460	74.2	89	136	2	47	25
KS84170E-8-3	24	3441	76.2	85	138	2.7	42	23
NE88588	33	3440	74.4	91	138	3	43	30
TX88A6480	16	3420	71.6	70	133	1.7	70	53
TX87V1613	12	3418	75.8	83	138	3.7	45	22
WI88-028	40	3349	76.1	69	138	0.3	62	27
T67	42	3345	74.1	84	137	2.7	52	23
XH1436	35	3333	73.1	78	136	1.3	53	22
WI88-181	39	3324	75.8	66	134	1	53	27
HBC302E	25	3288	74	72	138	1.7	37	30
CO860086	18	3284	70.7	78	139	1	55	22
TX88V5433	15	3267	76.2	77	133	2	68	25
KARL	46	3253	77.1	75	132	2.7	67	20
2180	49	3245	72.3	62	133	1.7	65	27
SCOUT66	2	3152	77.1	109	138	3.3	65	25
XH1319	34	3133	74.5	80	137	2.3	58	25
TX88V4524	13	3124	75	75	137	1.3	50	27
KS87H325-2	26	3052	76.8	82	134	2.3	53	25
TX88V5440	10	3016	75.3	69	133	3	58	33
TX84V1418HF	9	2912	74.7	75	137	3	33	40
TH902	45	2786	74.5	85	137	2.7	38	28
TX89V4138	14	2784	74	81	138	3	28	32
TH901	44	2769	74.3	76	137	3	23	20
KHARKOF	1	2754	70.1	122	143	4	57	22
TX88V4636	8	2654	73.2	75	137	1.7	25	37
TX88V4635	11	2575	71.6	77	137	2.3	28	33
KSSB-369-7	22	2427	73.4	68	135	4	15	32
MEAN		3392						
LSD(.05)		405						
C.V.		7.4						

LIND

WASHINGTON

TWO REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	STAND %
XH1436	35	1653	72.4	72	133	57
C0870449	21	1562	73.4	70	134	63
XH1497	37	1552	74.3	72	133	57
W87-018	38	1509	74.2	67	133	67
KS89H50-4	28	1491	74.8	71	134	73
TX88A6533	17	1461	77.4	64	135	47
T13	41	1442	73.7	69	135	63
KS84170E-8-3	24	1435	76.2	68	133	53
OK89421	7	1421	75.6	69	135	53
N87V106	29	1413	74.2	65	135	47
XH1319	34	1403	73.1	73	132	67
NE88584	32	1358	74.2	77	134	63
XH1437	36	1348	74.8	77	134	40
SCOUT66	2	1328	75.3	78	135	63
NE88588	33	1322	76.2	72	135	50
C0860235	20	1307	76	67	138	43
TH901	44	1305	73.7	71	133	63
TH902	45	1284	73.3	72	133	70
OK89399	6	1271	73.3	70	133	63
TX88V4635	11	1261	74.7	64	136	50
OK89499	5	1237	72.9	64	136	50
HBC302E	25	1231	76.6	66	135	53
KS831374-142	23	1227	75.6	67	132	53
TX89V4138	14	1217	76.5	71	134	47
NE88427	31	1197	74.8	67	136	27
WI88-181	39	1187	75.9	65	134	47
TAM-107	3	1176	74.2	63	133	57
T67	42	1173	75.3	70	134	53
TX88A6480	16	1169	75.3	64	133	37
KS89H48-1	27	1144	75.5	69	133	60
TX88V5433	15	1109	75.2	67	135	47
KHARKOF	1	1100	75.1	85	141	57
KS87H325-2	26	1093	76.6	69	132	60
TX88V4524	13	1075	76.9	60	135	30
TX88V5440	10	1006	74.3	64	133	40
C0860094	19	1005	70.8	69	140	27
TX88V4636	8	980	74	70	136	30
NE88595	30	976	73.8	69	136	27
TX84V1418HF	9	898	74.3	65	137	30
WI88-028	40	894	74.6	64	134	27
TX87V1613	12	875	73.9	69	137	20
C0860086	18	873	74.6	64	140	30
KSSB-369-7	22	793	75.2	64	133	27
OK88W833	4	769	74.9	62	135	23
T21-3	43	655	72.9	68	136	13
MEAN		1204				
LSD(.05)		359				
C.V.		18.4				

ABERDEEN

IDAHO

TWO REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	LODGING 0-9	STRAW STRENGTH 0-5	STAND %
CO860086	18	10706	80.4	99	1	1.5	100
TX89V4138	14	10407	84.1	107	3.5	3.5	98
TX88V4635	11	10168	80.4	107	5.5	4	85
TX88A6480	16	9926	81.9	97	3.5	2.5	100
CO860235	20	9422	80.4	102	1	1.5	95
TAM-107	3	9338	81.3	99	0.5	2	95
T13	41	9112	79.3	107	3	3	88
TX87V1613	12	9025	82.2	94	1	2	98
TX88V4636	8	8776	79.3	102	2	2.5	88
XH1497	37	8746	81.1	102	1	2.5	100
IDO360	46	8722	78.4	107	3	3	93
TX88A6533	17	8699	81.1	91	1.5	2.5	95
XH1436	35	8642	80.5	112	1.5	2	93
OK89421	7	8571	80.4	112	6	3.5	100
OK89499	5	8561	81.8	112	2.5	2.5	95
WI88-181	39	8433	81.7	91	1	2	85
CO860094	19	8389	75.7	107	2.5	2.5	93
NE88595	30	8265	81	107	1	2	90
CO870449	21	8114	81.8	107	1	1.5	75
NE88427	31	8104	81.1	107	3	2.5	78
WI88-028	40	8040	81	81	1	1.5	83
XH1437	36	7878	80.6	117	4	3.5	100
OK88W833	4	7730	82.2	107	1.5	2	95
OK89399	6	7700	79.9	112	3	2.5	98
HBC302E	25	7687	81.9	102	1	1.5	98
T21-3	43	7677	80.6	107	5.5	3	90
TX84V1418HF	9	7421	79.9	112	0.5	2.5	95
TX88V5433	15	7381	81.3	99	1	2.5	93
KSSB-369-7	22	6863	82.2	86	1	1.5	93
XH1319	34	6833	80.6	97	1	2	98
KS89H50-4	28	6712	81.1	94	5.5	5	100
W87-018	38	6510	81.8	89	1	2.5	90
T67	42	6493	81	117	3	2	88
N87V106	29	6459	79.7	107	1.5	2.5	95
NE88584	32	6379	80.4	107	3.5	3	98
KS84170E-8-3	24	6234	81.8	112	1	2	93
KS87H325-2	26	6187	81	97	1.5	2.5	100
TX88V5440	10	6069	79.7	91	0.5	2	83
TX88V4524	13	6032	81.3	86	1	2	90
KS89H48-1	27	5938	79.9	91	3	3.5	100
TH901	44	5925	80.4	97	2	3.5	90
SCOUT66	2	5619	81.1	109	6.5	4.5	98
KHARKOF	1	5161	79.2	112	8	3.5	98
NE88588	33	5030	80.4	102	1	2.5	100
KS831374-142	23	4795	79.9	91	1	1.5	93
MEAN		7664					
LSD(.05)		2257					
C.V.		14.6					

CASSELTON

N. DAKOTA

ONE REPLICATION

C.I. OR SEL. NO.	ENTRY NO.	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %
KHARKOF	1	165	85
SCOUT66	2	164	80
TAM-107	3	158	75
OK88W833	4	159	65
OK89499	5	164	70
OK89399	6	160	70
OK89421	7	158	85
TX88V4636	8	158	60
TX84V1418HF	9	159	65
TX88V5440	10	156	90
TX88V4635	11	159	45
TX87V1613	12	157	90
TX88V4524	13	158	65
TX89V4138	14	158	30
TX88V5433	15	158	75
TX88A6480	16	157	85
TX88A6533	17	157	85
CO860086	18	164	85
CO860094	19	164	90
CO860235	20	164	70
CO870449	21	160	70
KSSB-369-7	22	158	15
KS831374-142	23	157	70
KS84170E-8-3	24	158	75
HBC302E	25	158	65
KS87H325-2	26	158	65
KS89H48-1	27	158	80
KS89H50-4	28	159	30
N87V106	29	158	65
NE88595	30	158	85
NE88427	31	158	60
NE88584	32	157	65
NE88588	33	158	70
XH1319	34	158	15
XH1436	35	158	20
XH1437	36	158	25
XH1497	37	158	35
W87-018	38	158	5
WI88-181	39	.	0
WI88-028	40	.	0
T13	41	160	5
T67	42	.	0
T21-3	43	159	30
TH901	44	160	10
TH902	45	160	15

Table 2. Summary of mean yields (kg/ha) of 45 wheats grown in the Southern Regional Performance Nursery at 27 locations with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PROSPER TEXAS		CHILLI-COTHE TEXAS		BUSHLAND (IRR.) TEXAS		BUSHLAND (DRYL.) TEXAS		TEXAS STATE MEAN	
Quantum Hybrid Wheat	XH1497	37	4403	1	3986	19	6328	4	3275	10	4498	2
TX71A889/2172//2157	HBC302E	25	3609	23	4418	8	6032	8	3235	13	4324	9
Quantum Hybrid Wheat	XH1436	35	4122	7	4082	15	5671	17	2708	37	4146	19
Quantum Hybrid Wheat	XH1437	36	4057	8	3988	18	5530	21	2928	29	4126	20
OK83197/Sxl	OK89421	7	3939	13	3369	34	5438	27	3497	1	4061	22
TX71A889/TAM-101	TX88A6533	17	2977	36	2589	44	5506	24	3318	8	3597	35
Hawk/(Pkg16/Lov13//Jgw13)//TAM-108	KS84170E-8-3	24	3741	19	3874	21	6528	2	3448	3	4398	4
Dular/Eagle//2*Cheney/Larned/3/Colt	KS89H48-1	27	3239	31	4490	5	6225	6	3212	14	4292	11
Cty sib/4/Aiv/3/Tcs//TI sib/Sdy	OK89499	5	4178	4	4764	4	4999	36	2800	34	4185	16
TAM-108/Lancota	T21-3	43	3058	35	3582	28	5849	14	3044	21	3883	28
TAM-107/TAM-105	T13	41	2753	38	2638	42	5001	35	3345	6	3434	40
Siouxland/TAM-101	TX88A6480	16	3730	20	3544	29	5483	26	3210	15	3992	25
TAM-107	TAM-107	3	3354	29	3367	35	5259	30	3428	4	3852	29
Karl Resel.	TX88V5433	15	3717	21	3607	27	5784	15	2890	32	3999	24
TAM-105/3/NE70654/BBY/Bow's'	TX87V1613	12	3981	10	4371	9	5580	18	3185	16	4279	12
Colt/Victory	W87-018	38	3475	26	4456	7	6575	1	2800	35	4326	8
WI81-133/Arkan	WI88-181	39	3889	15	4898	3	5532	20	3017	23	4334	7
Bulk Selection	KSSB-369-7	22	3571	24	4932	2	6436	3	3371	5	4577	1
NE78696/Payne	TX88V4524	13	3748	18	4170	12	6075	7	3470	2	4366	5
2165/Cty sib	OK89399	6	3885	16	4060	16	4907	40	2892	31	3936	26
Bennett/TAM-107	NE88427	31	2596	39	3042	37	5138	32	3152	19	3482	39
Complex Pedigree	N87V106	29	2430	41	4490	5	5987	12	3329	7	4059	23
TAM-200//TX38949-2/TAM-107	TX89V4138	14	4046	9	5270	1	5064	33	3286	9	4417	3
Complex Pedigree	KS87H325-2	26	3750	17	4154	13	6023	9	3259	11	4297	10
Dular/Eagle//2*Cheney/Larned/3/Colt	KS89H50-4	28	3445	28	4360	10	5521	23	3026	22	4088	21
Karl sib	KS831374-142	23	4136	5	4035	17	6012	11	3241	12	4356	6
Arkan/Colt//Chisholm sib	NE88595	30	3064	34	3396	32	4985	37	2643	39	3522	38
Csm*3/3/Newton/Largo//2*Csm	OK88W833	4	3970	12	3950	20	6261	5	2757	36	4235	14
Quantum Hybrid Wheat	XH1319	34	3981	10	3672	24	6023	9	3165	17	4210	15
2165/Vona	T67	42	3488	25	3697	22	5528	22	2457	41	3792	30
TX78V2154/Siouxland	TX88V4635	11	4270	2	4183	11	5748	16	2907	30	4277	13
Centura/Dawn//Colt sib	NE88584	32	3071	33	3645	26	5183	31	2661	38	3640	33
Vona/TX71D4889-V3	TX84V1418HF	9	3896	14	3374	33	4974	38	2881	33	3781	31
Arkan/Hawk	C0870449	21	3345	30	3022	38	4936	39	3015	25	3579	36
TX78V2154/Siouxland	TX88V4636	8	4208	3	3674	23	5577	19	3165	17	4156	17
HRW Hybrid	TH901	44	3692	22	3656	25	5319	29	3013	26	3920	27
Karl Resel.	TX88V5440	10	4125	6	4116	14	5331	28	3017	23	4147	18
Centura/Dawn//Colt sib	NE88588	33	2937	37	3428	31	5907	13	2446	42	3679	32
W84-179/W81-171	WI88-028	40	3118	32	2932	39	5492	25	2961	27	3626	34
TX73165/Sandy	C0860086	18	2425	42	2598	43	4634	41	3049	20	3176	42
HRW Hybrid	TH902	45	3461	27	3255	36	5006	34	2430	43	3538	37
NE76667/Hawk	C0860094	19	2136	43	2833	40	4129	43	2385	44	2871	43
Scout 66	SCOUT66	2	2513	40	3513	30	4268	42	2959	28	3313	41
Sandy/Hail	C0860235	20	1870	44	2670	41	3578	44	2629	40	2687	44
Kharkof	KHARKOF	1	1347	45	1592	45	3107	45	1704	45	1937	45
	MEAN		3439		3728		5433		2991		3898	
	LSD(.05)		776		536		811		650		612	
	C.V.		13.9		8.9		9.2		13.4		11.1	

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		NORTH PLATTE NEBRASKA		HEMING-FORD NEBRASKA		NEBRASKA STATE MEAN		CLOVIS (IRR.) NEW MEXICO		CLOVIS (DRYL.) NEW MEXICO		FARMINGTON NEW MEXICO		NEW MEXICO STATE MEAN	
XH1497	37	4269	9	5015	10	3415	8	4233	4	7491	4	3371	19	5883	2	5582	2
HBC302E	25	2608	42	5884	1	3107	19	3866	14	9482	1	3765	12	4954	10	6067	1
XH1436	35	3933	18	4367	25	3028	22	3776	19	6968	8	3466	18	4882	11	5105	6
XH1437	36	3788	24	5154	7	3672	4	4205	6	6535	13	2615	37	5112	7	4754	12
OK89421	7	3812	22	4973	11	3316	11	4034	7	6712	12	2928	33	3907	26	4516	18
TX88A6533	17	3881	19	4588	17	2987	24	3819	16	8254	2	4019	9	4437	17	5570	3
KS84170E-8-3	24	4587	3	4540	18	2806	31	3978	8	4873	30	4860	2	3890	28	4541	17
KS89H48-1	27	4559	4	4651	15	2273	40	3828	15	6260	18	3741	13	3268	42	4423	19
OK89499	5	3676	26	4117	31	2833	27	3542	28	4330	39	4237	7	3905	27	4157	29
T21-3	43	4606	2	5284	4	2813	30	4234	3	4721	34	4276	6	4060	23	4352	22
T13	41	4102	14	3733	37	3369	9	3734	22	6493	14	4583	5	5346	5	5474	4
TX88A6480	16	3315	32	4534	19	2730	33	3526	30	4647	35	4613	4	3589	33	4283	24
TAM-107	3	3586	29	4530	21	3292	13	3803	17	7232	6	4684	3	4206	21	5374	5
TX88V5433	15	4217	12	4354	26	2456	37	3676	25	6953	9	3196	24	3675	31	4608	16
TX87V1613	12	2877	39	4330	27	3282	14	3496	31	7263	5	3168	26	4795	13	5075	7
W87-018	38	4022	17	4639	16	2953	25	3871	13	5039	25	3530	17	3428	37	3999	34
WI88-181	39	1954	43	4486	23	2224	42	2888	44	7898	3	3363	21	3572	34	4944	9
KSSB-369-7	22	1562	45	5278	5	2578	35	3139	41	6864	10	3278	23	4539	15	4894	11
TX88V4524	13	3210	35	4325	29	2377	38	3304	35	4901	29	3725	14	3376	38	4000	33
OK89399	6	3617	27	4329	28	3030	21	3659	26	6835	11	2432	40	3562	35	4276	25
NE88427	31	4174	13	4398	24	3344	10	3972	10	5481	21	4186	8	4252	20	4640	15
N87V106	29	4224	11	5882	2	2869	26	4325	1	6093	19	3154	29	3302	41	4183	27
TX89V4138	14	2995	37	4120	30	3842	1	3652	27	3270	44	3166	27	5043	8	3826	37
KS87H325-2	26	4028	15	3795	35	2027	44	3283	37	6402	17	3570	16	4960	9	4977	8
KS89H50-4	28	4869	1	3739	36	2750	32	3786	18	5126	24	2551	38	3103	43	3593	41
KS831374-142	23	4318	7	5067	9	2365	39	3917	12	4576	36	2718	35	3369	39	3554	42
NE88595	30	4482	5	4768	14	3520	7	4257	2	3668	43	3799	11	3774	29	3747	39
OK88W833	4	3609	28	4873	13	2819	29	3767	21	2969	45	2350	43	4409	18	3243	45
XH1319	34	2998	36	3817	34	2693	34	3169	39	6405	16	3659	15	3997	25	4687	14
T67	42	4025	16	5435	3	3234	15	4231	5	4859	31	3115	31	4107	22	4027	31
TX88V4635	11	3499	31	3959	33	3156	18	3538	29	4729	33	1545	45	4301	19	3525	44
NE88584	32	4288	8	3969	32	3674	3	3977	9	3758	41	3140	30	6241	1	4380	21
TX84V1418HF	9	3850	20	5222	6	2826	28	3966	11	4740	32	2860	34	4799	12	4133	30
CO870449	21	2883	38	3561	38	3021	23	3155	40	4519	38	3163	28	5554	4	4412	20
TX88V4636	8	2779	40	4505	22	3184	17	3489	32	4906	28	2386	42	3325	40	3539	43
TH901	44	3831	21	4972	12	2516	36	3773	20	5223	23	3369	20	3000	45	3864	36
TX88V5440	10	4248	10	3475	39	2196	43	3306	34	5672	20	2425	41	3064	44	3720	40
NE88588	33	3583	30	4534	20	3031	20	3716	23	5017	26	3816	10	3681	30	4171	28
WI88-028	40	1909	44	2561	43	1819	45	2097	45	7060	7	3175	25	4450	16	4895	10
CO860086	18	3239	34	3408	40	3227	16	3291	36	4130	40	3099	32	4776	14	4002	32
TH902	45	3679	25	5117	8	2271	41	3689	24	6409	15	2534	39	4058	24	4334	23
CO860094	19	4351	6	2251	44	3585	5	3396	33	4914	27	2193	44	5689	3	4265	26
SCOUT66	2	3277	33	3248	41	3311	12	3279	38	3731	42	5167	1	5219	6	4706	13
CO860235	20	3791	23	1679	45	3740	2	3070	42	4566	37	3338	22	3519	36	3808	38
KHARKOF	1	2732	41	2640	42	3560	6	2977	43	5411	22	2707	36	3610	32	3909	35
MEAN		3641		4314		2958		3638		5631		3356		4222		4403	
LSD(.05)		995		1126		556		N.S.		1667		1315		1076		N.S.	
C.V.		16.8		16.1		11.6		15.6		18.2		24.1		18.2		19.6	

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	FORT COLLINS COLORADO		AKRON* COLORADO		JULESBURG COLORADO		WALSH COLORADO		BURLINGTON COLORADO		COLORADO STATE MEAN		ABERDEEN IDAHO		LIND WASHINGTON	
XH1497	37	10282	16	2121	9	2144	18	1690	4	2520	2	4159	6	8746	10	1552	3
HBC302E	25	11263	5	1813	13	1608	38	1332	24	1727	24	3983	12	7687	24	1231	22
XH1436	35	10323	15	1678	19	2230	11	1296	28	1239	40	3772	20	8642	12	1653	1
XH1437	36	10860	8	1299	36	2090	20	1366	22	2318	4	4159	7	7878	21	1348	13
OK89421	7	10461	11	1876	12	2053	22	1686	6	2191	9	4098	8	8571	13	1421	9
TX88A6533	17	11047	7	2242	7	2338	5	1794	2	1873	16	4263	5	8699	11	1461	6
KS84170E-8-3	24	10226	18	2114	10	2253	9	1186	39	1829	19	3874	15	6234	35	1435	8
KS89H48-1	27	9744	23	1804	14	2183	15	1535	12	1920	13	3846	17	5938	39	1144	30
OK89499	5	10666	10	1521	27	2185	13	1212	36	2274	7	4084	9	8561	14	1237	21
T21-3	43	10838	9	1959	11	1832	27	1405	20	1720	25	3949	13	7677	25	655	45
T13	41	11263	5	2943	2	2272	8	1795	1	2786	1	4529	2	9112	7	1442	7
TX88A6480	16	12425	1	2177	8	2091	19	1292	30	1285	38	4273	4	9926	4	1169	29
TAM-107	3	11443	3	2489	5	2151	17	1561	11	2341	3	4374	3	9338	6	1176	27
TX88V5433	15	9307	32	1195	40	1823	28	1195	38	1827	20	3538	30	7381	27	1109	31
TX87V1613	12	10338	14	1265	37	1675	33	1454	15	1950	12	3854	16	9025	8	875	41
W87-018	38	10278	17	1700	18	2017	24	1109	42	1543	30	3737	22	6510	31	1509	4
WI88-181	39	10427	12	1647	21	1344	43	969	44	1516	31	3564	29	8433	15	1187	26
KSSB-369-7	22	11431	4	1607	23	1625	35	1410	19	1693	26	4040	10	6863	28	793	43
TX88V4524	13	11928	2	1236	38	2560	3	1634	7	2228	8	4587	1	6032	38	1075	34
OK89399	6	10427	12	1589	24	2243	10	1196	37	2280	6	4037	11	7700	23	1271	19
NE88427	31	10046	21	1478	29	2274	7	1506	13	1759	23	3896	14	8104	19	1197	25
N87V106	29	8463	38	1198	39	1504	41	1098	43	1319	36	3096	44	6459	33	1413	10
TX89V4138	14	9486	30	2972	1	1490	42	1246	34	978	45	3300	40	10407	2	1217	24
KS87H325-2	26	8407	39	1542	26	1837	26	1366	23	1897	15	3377	33	6187	36	1093	33
KS89H50-4	28	7922	43	1428	32	2070	21	1380	21	1904	14	3319	38	6712	30	1491	5
KS831374-142	23	8564	36	1608	22	1720	31	1293	29	1228	42	3202	41	4795	44	1227	23
NE88595	30	8878	35	1192	41	2517	4	1687	5	2057	10	3785	19	8265	17	976	38
OK88W833	4	10054	20	1457	30	2012	25	1298	27	1856	17	3805	18	7730	22	769	44
XH1319	34	9707	25	1799	15	2169	16	1185	40	1764	22	3706	24	6833	29	1403	11
T67	42	10114	19	1348	34	1519	40	1430	16	1351	34	3603	28	6493	32	1173	28
TX88V4635	11	9401	31	1585	25	1315	44	1129	41	1462	33	3327	36	10168	3	1261	20
NE88584	32	8262	41	1057	43	2280	6	1619	9	2315	5	3619	26	6379	34	1358	12
TX84V1418HF	9	9613	27	1389	33	1264	45	1254	33	1101	43	3308	39	7421	26	898	39
C0870449	21	9531	29	1178	42	1621	37	1737	3	1573	29	3616	27	8114	18	1562	2
TX88V4636	8	7971	42	1726	16	1575	39	1416	18	1796	21	3190	42	8776	9	980	37
TH901	44	9550	28	839	45	1661	34	1262	32	1493	32	3492	31	5925	40	1305	17
TX88V5440	10	9636	26	1455	31	1773	30	1213	35	1310	37	3483	32	6069	37	1006	35
NE88588	33	8501	37	1048	44	2026	23	1429	17	1331	35	3322	37	5030	43	1322	15
WI88-028	40	9307	32	2432	6	1622	36	848	45	1652	27	3357	35	8040	20	894	40
C0860086	18	9912	22	2589	4	1785	29	1610	10	1592	28	3725	23	10706	1	873	42
TH902	45	9718	24	1343	35	1717	32	1302	26	1831	18	3642	25	.	.	1284	18
C0860094	19	8938	34	2612	3	3243	1	1631	8	1230	41	3760	21	8389	16	1005	36
SCOUT66	2	6970	44	1511	28	2221	12	1474	14	1979	11	3161	43	5619	41	1328	14
C0860235	20	8266	40	1712	17	2619	2	1292	30	1279	39	3364	34	9422	5	1307	16
KHARKOF	1	5372	45	1658	20	2184	14	1304	25	1018	44	2470	45	5161	42	1100	32
MEAN		9724		1698		1972		1381		1736		3703		7640		1204	
LSD(.05)		1924		525		502		293		549		962		2283		359	
C.V.		12.2		19.0		15.7		13.1		19.5		17.3		14.8		18.4	

* Not used in state or regional means.

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	HUTCHINSON KANSAS		HAYS KANSAS		MANHATTAN KANSAS		COLBY* KANSAS		GARDEN CITY KANSAS		KANSAS STATE MEAN		COLUMBIA MISSOURI	
XH1497	37	1423	30	3903	6	2397	20	2289	2	2618	1	2585	13	3549	16
HBC302E	25	1972	18	3528	19	2849	5	1175	40	1979	29	2582	14	3288	30
XH1436	35	2119	15	3602	17	2733	13	1576	26	2242	13	2674	10	3333	28
XH1437	36	1645	25	3858	9	2543	16	1825	16	2179	18	2556	15	3460	21
OK89421	7	1718	21	3777	11	2772	8	1865	13	2562	2	2707	8	3810	5
TX88A6533	17	1346	32	3688	13	1916	34	1502	30	2195	16	2286	28	4109	3
KS84170E-8-3	24	2685	4	3452	23	3601	1	1417	31	1872	36	2902	3	3441	22
KS89H48-1	27	2200	13	3934	5	2789	7	1879	12	2468	4	2848	5	4255	1
OK89499	5	2220	10	3354	28	2672	15	1410	32	2118	24	2591	12	4150	2
T21-3	43	2266	9	4174	2	2380	22	1363	36	1970	30	2697	9	3797	6
T13	41	790	42	3894	7	1686	39	2425	1	2174	20	2136	37	3775	7
TX88A6480	16	1349	31	3540	18	1880	35	1374	34	2349	8	2279	29	3420	24
TAM-107	3	812	40	3499	22	1649	41	2038	5	2287	10	2062	39	3520	19
TX88V5433	15	2611	6	3524	21	2854	4	1610	24	2260	12	2812	6	3267	32
TX87V1613	12	1516	27	3286	30	2488	18	1031	43	1876	35	2292	27	3418	25
W87-018	38	2206	12	3676	14	2343	23	1932	8	1766	40	2498	17	3523	18
WI88-181	39	2056	17	3389	26	2843	6	1814	17	1636	43	2481	18	3324	29
KSSB-369-7	22	1938	19	3060	37	2139	32	908	44	1966	31	2276	30	2427	45
TX88V4524	13	1773	20	2890	41	2283	26	1722	19	1890	34	2209	36	3124	35
OK89399	6	1670	23	3266	31	2154	31	1367	35	1961	32	2263	31	3538	17
NE88427	31	1485	28	3977	4	2158	30	2132	4	2269	11	2472	19	3509	20
N87V106	29	2811	2	4194	1	3061	3	1533	28	1701	42	2942	2	3729	8
TX89V4138	14	1443	29	3829	10	1782	38	1928	9	2300	9	2338	26	2784	40
KS87H325-2	26	2537	7	2582	45	2756	11	1338	37	2123	23	2499	16	3052	36
KS89H50-4	28	2658	5	3605	16	2772	9	1903	10	2374	6	2852	4	3668	10
KS831374-142	23	3024	1	3091	35	3356	2	1681	21	2524	3	2999	1	3687	9
NE88595	30	1253	33	3988	3	2174	29	1834	15	2369	7	2446	21	3651	11
OK88W833	4	2385	8	3098	34	2035	33	2230	3	2112	27	2407	23	3645	12
XH1319	34	1240	34	3894	7	1784	37	1583	25	2118	24	2259	32	3133	34
T67	42	2715	3	3387	27	2763	10	1246	38	2217	14	2771	7	3345	27
TX88V4635	11	1021	38	2892	40	2429	19	1511	29	2118	24	2115	38	2575	44
NE88584	32	2126	14	3528	19	2323	24	1733	18	2446	5	2606	11	3562	15
TX84V1418HF	9	2211	11	3120	33	2713	14	1114	41	1827	39	2468	20	2912	38
CO870449	21	1040	37	3239	32	2527	17	1408	33	2042	28	2212	35	3586	14
TX88V4636	8	915	39	3645	15	2189	28	1632	23	2192	17	2235	34	2654	43
TH901	44	1665	24	3425	24	2383	21	1883	11	2177	19	2413	22	2769	41
TX88V5440	10	2119	15	2842	43	2741	12	1657	22	1901	33	2401	24	3016	37
NE88588	33	1713	22	3398	25	2275	27	1861	14	2168	21	2388	25	3440	23
WI88-028	40	1104	36	3017	38	2288	25	890	45	1553	44	1991	40	3349	26
CO860086	18	373	45	3078	36	765	44	2011	6	2199	15	1604	44	3284	31
TH902	45	1569	26	3746	12	1809	36	1556	27	1849	37	2243	33	2786	39
CO860094	19	584	44	2959	39	1631	42	1222	39	1715	41	1722	43	3950	4
SCOUT66	2	1125	35	3302	29	924	43	1704	20	2141	22	1873	41	3152	33
CO860235	20	651	43	2874	42	1686	40	1047	42	1847	38	1765	42	3622	13
KHARKOF	1	809	41	2603	44	665	45	1984	7	1332	45	1352	45	2754	42
MEAN		1709		3436		2288		1625		2089		2380		3381	
LSD(.05)		440		475		778		388		375		596		409	
C.V.		15.9		8.5		20.9		14.7		11.1		14.0		7.4	

* Not used in state or regional means.

Table 2. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	STILLWATER OKLAHOMA		ALTUS OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA		OKLAHOMA STATE MEAN		REGIONAL AVERAGE	
XH1497	37	2139	20	1907	24	3086	11	6828	15	3490	11	4089	1
HBC302E	25	1734	32	2042	17	2623	20	7022	7	3355	19	3959	2
XH1436	35	2168	17	2022	18	3679	2	7313	1	3796	2	3913	3
XH1437	36	2226	12	2014	19	2776	17	7043	6	3515	10	3879	4
OK89421	7	2288	7	2070	16	2632	19	6301	32	3323	21	3848	5
TX88A6533	17	1589	37	2005	20	2564	23	6978	9	3284	24	3846	6
KS84170E-8-3	24	2532	3	2252	6	2747	18	6845	13	3594	8	3829	7
KS89H48-1	27	2218	13	2347	3	3475	4	6884	10	3731	3	3798	8
OK89499	5	2785	1	2121	11	2864	15	6624	20	3599	6	3795	9
T21-3	43	2217	14	1764	30	3512	3	7072	3	3641	4	3783	10
T13	41	1133	42	1539	40	2356	33	6085	35	2778	39	3739	11
TX88A6480	16	1867	29	1929	23	2454	28	6872	12	3280	25	3730	12
TAM-107	3	1191	41	1534	41	1886	38	5905	38	2629	42	3729	13
TX88V5433	15	2279	8	2132	10	4215	1	6574	22	3800	1	3728	14
TX87V1613	12	2193	16	1906	25	1514	43	6436	26	3012	35	3711	15
W87-018	38	2534	2	2318	4	2417	29	6807	16	3519	9	3659	16
WI88-181	39	1987	25	1931	22	2367	32	7062	4	3337	20	3652	17
KSSB-369-7	22	1666	34	2075	14	2386	31	7302	2	3357	18	3647	18
TX88V4524	13	1657	35	1890	26	3252	7	7052	5	3463	14	3626	19
OK89399	6	2530	4	1832	29	2496	27	6407	28	3316	22	3621	20
NE88427	31	1576	38	1730	32	3105	10	6017	37	3107	32	3619	21
N87V106	29	2208	15	2375	1	1749	41	5870	39	3050	34	3589	22
TX89V4138	14	2260	9	1852	27	1783	40	6733	19	3157	28	3588	23
KS87H325-2	26	1845	30	2236	7	3303	5	6465	25	3462	15	3586	24
KS89H50-4	28	2426	5	2318	4	3135	9	6506	23	3596	7	3577	25
KS831374-142	23	2252	10	2348	2	3027	12	6783	17	3603	5	3550	26
NE88595	30	1684	33	1843	28	2877	14	6422	27	3206	27	3550	27
OK88W833	4	2358	6	2157	9	2576	22	6350	30	3361	17	3536	28
XH1319	34	1946	26	1593	37	2408	30	6583	21	3132	29	3527	29
T67	42	2061	21	1750	31	2517	26	5209	42	2884	37	3520	30
TX88V4635	11	2057	22	2168	8	3159	8	6477	24	3465	13	3517	31
NE88584	32	2245	11	1978	21	1514	42	5159	43	2724	40	3469	32
TX84V1418HF	9	1996	24	1673	34	2557	24	6185	33	3103	33	3447	33
CO870449	21	1517	40	1548	38	2531	25	6884	11	3120	30	3443	34
TX88V4636	8	1795	31	2077	13	2920	13	6751	18	3386	16	3414	35
TH901	44	2147	19	1694	33	2313	34	6829	14	3245	26	3408	36
TX88V5440	10	2157	18	2091	12	3262	6	6373	29	3471	12	3407	37
NE88588	33	1888	28	1606	36	2105	35	6173	34	2943	36	3311	38
WI88-028	40	2021	23	2072	15	2801	16	6309	31	3301	23	3294	39
CO860086	18	1553	39	1645	35	2593	21	5701	40	2873	38	3290	40
TH902	45	1910	27	1544	39	2035	37	6978	8	3117	31	3262	41
CO860094	19	1090	43	1472	42	2043	36	6040	36	2661	41	3215	42
SCOUT66	2	1610	36	1066	43	967	45	5028	44	2168	44	3045	43
CO860235	20	943	45	664	44	1804	39	5670	41	2271	43	3013	44
KHARKOF	1	1033	44	618	45	1139	44	3435	45	1556	45	2357	45
MEAN		1945		1861		2567		6408		3195		3558	
LSD(.05)		322		280		556		827		566		372	
C.V.		10.2		9.2		13.3		7.9		10.4		15.7	

Table 3. Summary of mean yields (kg/ha) and ranks of 45 wheats grown in the 1992 Southern Regional Performance Nursery at 14 locations from which a CV of 15 or less and a significant F test for entries were obtained.

C.I. OR SEL. NO.	ENTRY NO.	PROSPER TEXAS		CHILLI-COTHE TEXAS		BUSHLAND (IRR.) TEXAS		BUSHLAND (DRYL.) TEXAS		STILLWATER OKLAHOMA		ALTUS OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA	
XH1497	37	4403	1	3986	19	6328	4	3275	10	2139	20	1907	24	3086	11	6828	15
KS89H48-1	27	3239	31	4490	5	6225	6	3212	14	2218	13	2347	3	3475	4	6884	10
XH1437	36	4057	8	3988	18	5530	21	2928	29	2226	12	2014	19	2776	17	7043	6
XH1436	35	4122	7	4082	15	5671	17	2708	37	2168	17	2022	18	3679	2	7313	1
OK89499	5	4178	4	4764	4	4999	36	2800	34	2785	1	2121	11	2864	15	6624	20
H8C302E	25	3609	23	4418	8	6032	8	3235	13	1734	32	2042	17	2623	20	7022	7
TX88V4524	13	3748	18	4170	12	6075	7	3470	2	1657	35	1890	26	3252	7	7052	5
OK89421	7	3939	13	3369	34	5438	27	3497	1	2288	7	2070	16	2632	19	6301	32
T21-3	43	3058	35	3582	28	5849	14	3044	21	2217	14	1764	30	3512	3	7072	3
KS84170E-8-3	24	3741	19	3874	21	6528	2	3448	3	2532	3	2252	6	2747	18	6845	13
TX88A6480	16	3730	20	3544	29	5483	26	3210	15	1867	29	1929	23	2454	28	6872	12
W87-018	38	3475	26	4456	7	6575	1	2800	35	2534	2	2318	4	2417	29	6807	16
KSSB-369-7	22	3571	24	4932	2	6436	3	3371	5	1666	34	2075	14	2386	31	7302	2
TX89V4138	14	4046	9	5270	1	5064	33	3286	9	2260	9	1852	27	1783	40	6733	19
OK88W833	4	3970	12	3950	20	6261	5	2757	36	2358	6	2157	9	2576	22	6350	30
KS831374-142	23	4136	5	4035	17	6012	11	3241	12	2252	10	2348	2	3027	12	6783	17
TX88A6533	17	2977	36	2589	44	5506	24	3318	8	1589	37	2005	20	2564	23	6978	9
TX88V5433	15	3717	21	3607	27	5784	15	2890	32	2279	8	2132	10	4215	1	6574	22
TX87V1613	12	3981	10	4371	9	5580	18	3185	16	2193	16	1906	25	1514	43	6436	26
WI88-181	39	3889	15	4898	3	5532	20	3017	23	1987	25	1931	22	2367	32	7062	4
OK89399	6	3885	16	4060	16	4907	40	2892	31	2530	4	1832	29	2496	27	6407	28
KS89H50-4	28	3445	28	4360	10	5521	23	3026	22	2426	5	2318	4	3135	9	6506	23
TX88V4635	11	4270	2	4183	11	5748	16	2907	30	2057	22	2168	8	3159	8	6477	24
XH1319	34	3981	10	3672	24	6023	9	3165	17	1946	26	1593	37	2408	30	6583	21
TAM-107	3	3354	29	3367	35	5259	30	3428	4	1191	41	1534	41	1886	38	5905	38
TX88V5440	10	4125	6	4116	14	5331	28	3017	23	2157	18	2091	12	3262	6	6373	29
TX88V4636	8	4208	3	3674	23	5577	19	3165	17	1795	31	2077	13	2920	13	6751	18
T13	41	2753	38	2638	42	5001	35	3345	6	1133	42	1539	40	2356	33	6085	35
NE88595	30	3064	34	3396	32	4985	37	2643	39	1684	33	1843	28	2877	14	6422	27
NE88427	31	2596	39	3042	37	5138	32	3152	19	1576	38	1730	32	3105	10	6017	37
KS87H325-2	26	3750	17	4154	13	6023	9	3259	11	1845	30	2236	7	3303	5	6465	25
N87V106	29	2430	41	4490	5	5987	12	3329	7	2208	15	2375	1	1749	41	5870	39
T67	42	3488	25	3697	22	5528	22	2457	41	2061	21	1750	31	2517	26	5209	42
TH901	44	3692	22	3656	25	5319	29	3013	26	2147	19	1694	33	2313	34	6829	14
C0870449	21	3345	30	3022	38	4936	39	3015	25	1517	40	1548	38	2531	25	6884	11
TX84V1418HF	9	3896	14	3374	33	4974	38	2881	33	1996	24	1673	34	2557	24	6185	33
NE88584	32	3071	33	3645	26	5183	31	2661	38	2245	11	1978	21	1514	42	5159	43
NE88588	33	2937	37	3428	31	5907	13	2446	42	1888	28	1606	36	2105	35	6173	34
TH902	45	3461	27	3255	36	5006	34	2430	43	1910	27	1544	39	2035	37	6978	8
WI88-028	40	3118	32	2932	39	5492	25	2961	27	2021	23	2072	15	2801	16	6309	31
C0860086	18	2425	42	2598	43	4634	41	3049	20	1553	39	1645	35	2593	21	5701	40
C0860094	19	2136	43	2833	40	4129	43	2385	44	1090	43	1472	42	2043	36	6040	36
SCOUT66	2	2513	40	3513	30	4268	42	2959	28	1610	36	1066	43	967	45	5028	44
C0860235	20	1870	44	2670	41	3578	44	2629	40	943	45	664	44	1804	39	5670	41
KHARKOF	1	1347	45	1592	45	3107	45	1704	45	1033	44	618	45	1139	44	3435	45
MEAN		3439		3728		5433		2991		1945		1861		2567		6408	
LSD(.05)		776		536		811		650		322		280		556		827	
C.V.		13.9		8.9		9.2		13.4		10.2		9.2		13.3		7.9	

Table 3. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	FORT COLLINS COLORADO		WALSH COLORADO		HAYS KANSAS		GARDEN CITY KANSAS		HEMING-FORD NEBRASKA		COLUMBIA MISSOURI		REGIONAL AVERAGE	
XH1497	37	10282	16	1690	4	3903	6	2618	1	3415	8	3549	16	4101	1
KS89H48-1	27	9744	23	1535	12	3934	5	2468	4	2273	40	4255	1	4022	2
XH1437	36	10860	8	1366	22	3858	9	2179	18	3672	4	3460	21	3997	3
XH1436	35	10323	15	1296	28	3602	17	2242	13	3028	22	3333	28	3971	4
OK89499	5	10666	10	1212	36	3354	28	2118	24	2833	27	4150	2	3962	5
HBC302E	25	11263	5	1332	24	3528	19	1979	29	3107	19	3288	30	3944	6
TX88V4524	13	11928	2	1634	7	2890	41	1890	34	2377	38	3124	35	3940	7
OK89421	7	10461	11	1686	6	3777	11	2562	2	3316	11	3810	5	3939	8
T21-3	43	10838	9	1405	20	4174	2	1970	30	2813	30	3797	6	3935	9
KS84170E-8-3	24	10226	18	1186	39	3452	23	1872	36	2806	31	3441	22	3925	10
TX88A6480	16	12425	1	1292	30	3540	18	2349	8	2730	33	3420	24	3917	11
W87-018	38	10278	17	1109	42	3676	14	1766	40	2953	25	3523	18	3906	12
KSSB-369-7	22	11431	4	1410	19	3060	37	1966	31	2578	35	2427	45	3901	13
TX89V4138	14	9486	30	1246	34	3829	10	2300	9	3842	1	2784	40	3841	14
OK88W833	4	10054	20	1298	27	3098	34	2112	27	2819	29	3645	12	3815	15
KS831374-142	23	8564	36	1293	29	3091	35	2524	3	2365	39	3687	9	3811	16
TX88A6533	17	11047	7	1794	2	3688	13	2195	16	2987	24	4109	3	3810	17
TX88V5433	15	9307	32	1195	38	3524	21	2260	12	2456	37	3267	32	3800	18
TX87V1613	12	10338	14	1454	15	3286	30	1876	35	3282	14	3418	25	3773	19
WI88-181	39	10427	12	969	44	3389	26	1636	43	2224	42	3324	29	3761	20
OK89399	6	10427	12	1196	37	3266	31	1961	32	3030	21	3538	17	3745	22
KS89H50-4	28	7922	43	1380	21	3605	16	2374	6	2750	32	3668	10	3745	21
TX88V4635	11	9401	31	1129	41	2892	40	2118	24	3156	18	2575	44	3731	23
XH1319	34	9707	25	1185	40	3894	7	2118	24	2693	34	3133	34	3721	24
TAM-107	3	11443	3	1561	11	3499	22	2287	10	3292	13	3520	19	3680	25
TX88V5440	10	9636	26	1213	35	2842	43	1901	33	2196	43	3016	37	3662	26
TX88V4636	8	7971	42	1416	18	3645	15	2192	17	3184	17	2654	43	3659	27
T13	41	11263	5	1795	1	3894	7	2174	20	3369	9	3775	7	3652	28
NE88595	30	8878	35	1687	5	3988	3	2369	7	3520	7	3651	11	3643	29
NE88427	31	10046	21	1506	13	3977	4	2269	11	3344	10	3509	20	3643	30
KS87H325-2	26	8407	39	1366	23	2582	45	2123	23	2027	44	3052	36	3614	31
N87V106	29	8463	38	1098	43	4194	1	1701	42	2869	26	3729	8	3607	32
T67	42	10114	19	1430	16	3387	27	2217	14	3234	15	3345	27	3602	33
TH901	44	9550	28	1262	32	3425	24	2177	19	2516	36	2769	41	3597	34
CO870449	21	9531	29	1737	3	3239	32	2042	28	3021	23	3586	14	3568	35
TX84V1418HF	9	9613	27	1254	33	3120	33	1827	39	2826	28	2912	38	3506	36
NE88584	32	8262	41	1619	9	3528	19	2446	5	3674	3	3562	15	3468	37
NE88588	33	8501	37	1429	17	3398	25	2168	21	3031	20	3440	23	3461	38
TH902	45	9718	24	1302	26	3746	12	1849	37	2271	41	2786	39	3449	39
WI88-028	40	9307	32	848	45	3017	38	1553	44	1819	45	3349	26	3400	40
CO860086	18	9912	22	1610	10	3078	36	2199	15	3227	16	3284	31	3393	41
CO860094	19	8938	34	1631	8	2959	39	1715	41	3585	5	3950	4	3208	42
SCOUT66	2	6970	44	1474	14	3302	29	2141	22	3311	12	3152	33	3020	43
CO860235	20	8266	40	1292	30	2874	42	1847	38	3740	2	3622	13	2962	44
KHARKOF	1	5372	45	1304	25	2603	44	1332	45	3560	6	2754	42	2207	45
MEAN		9724		1381		3436		2089		2958		3381		3667	
LSD(.05)		1924		293		475		375		556		409		405	
C.V.		12.2		13.1		8.5		11.1		11.6		7.4		12.5	

Table 4. Summary of mean yields (kg/ha) and ranks of 45 wheats grown in the Southern Regional Performance Nursery for 5 intra-regional production zones (after Peterson, 1992).

C.I. OR SEL. NO.	ENTRY NO.	SOUTH-CENTRAL PLAINS		NORTH-CENTRAL PLAINS		NORTHERN HIGH PLAINS		INTER-MOUNTAIN WEST		SOUTHERN HIGH PLAINS		REGIONAL AVERAGE	
No. of locations		9		2		3		5		5		25	
XH1497	37	3778	7	3333	12	3227	1	5975	3	3689	4	4089	1
HBC302E	25	3664	15	2728	32	3073	4	5649	12	3959	1	3959	2
XH1436	35	3864	2	3333	11	2612	30	5705	9	3336	12	3913	3
XH1437	36	3682	12	3165	20	3187	2	5774	7	3124	18	3879	4
OK89421	7	3504	23	3292	15	3072	5	5535	14	3477	6	3848	5
TX88A6533	17	3249	33	2898	25	2933	10	5726	8	3916	2	3846	6
KS84170E-8-3	24	3851	4	4094	1	2874	16	4918	31	3248	16	3829	7
KS89H48-1	27	3890	1	3674	4	2918	12	4474	38	3443	7	3798	8
OK89499	5	3768	9	3174	18	2859	18	5440	16	2939	27	3795	9
T21-3	43	3721	10	3493	8	2945	9	5208	20	3083	22	3783	10
T13	41	2910	40	2894	26	2930	11	6106	1	3678	5	3739	11
TX88A6480	16	3419	27	2597	36	2637	27	5968	4	3222	17	3730	12
TAM-107	3	2979	39	2618	35	3007	7	5891	6	3838	3	3729	13
TX88V5433	15	3827	6	3536	6	2668	25	4786	34	3299	15	3728	14
TX87V1613	12	3420	26	2682	34	2652	26	5663	10	3389	8	3711	15
W87-018	38	3829	5	3183	17	2733	22	4935	29	2849	32	3659	16
WI88-181	39	3679	13	2398	38	2449	36	5169	23	3377	10	3652	17
KSSB-369-7	22	3707	11	1851	44	2865	17	5241	19	3378	9	3647	18
TX88V4524	13	3612	17	2746	29	3037	6	4958	28	3124	19	3626	19
OK89399	6	3450	25	2886	27	2951	8	5198	21	3063	24	3621	20
NE88427	31	3185	36	3166	19	2810	20	5389	17	3319	13	3619	21
N87V106	29	3568	20	3643	5	2901	14	4501	36	3075	23	3589	22
TX89V4138	14	3587	19	2388	40	2196	41	5999	2	2654	41	3588	23
KS87H325-2	26	3655	16	3392	10	2509	34	4535	35	3344	11	3586	24
KS89H50-4	28	3775	8	3821	3	2571	32	4395	40	2891	30	3577	25
KS831374-142	23	3857	3	3837	2	2672	24	4064	44	2870	31	3550	26
NE88595	30	3279	31	3328	13	3114	3	5083	26	2833	34	3550	27
OK88W833	4	3678	14	2822	28	2914	13	5156	24	2297	45	3536	28
XH1319	34	3482	24	2391	39	2583	31	4926	30	3307	14	3527	29
T67	42	3372	29	3394	9	2768	21	5024	27	2815	36	3520	30
TX88V4635	11	3553	21	2964	23	2245	39	5657	11	2486	44	3517	31
NE88584	32	3161	37	3305	14	2855	19	5183	22	2725	39	3469	32
TX84V1418HF	9	3332	30	3282	16	2529	33	5112	25	2712	40	3447	33
CO870449	21	3118	38	2705	33	2252	38	5556	13	2895	29	3443	34
TX88V4636	8	3507	22	2484	37	2625	29	4847	33	2813	37	3414	35
TH901	44	3416	28	3107	21	2709	23	4459	39	3009	25	3408	36
TX88V5440	10	3602	18	3494	7	2186	42	4394	41	2846	33	3407	37
NE88588	33	3239	34	2929	24	2631	28	4313	43	2975	26	3311	38
WI88-028	40	3207	35	2099	42	1945	44	4902	32	3120	20	3294	39
CO860086	18	2733	41	2002	43	2262	37	5899	5	2817	35	3290	40
TH902	45	3278	32	2744	30	2888	15	4333	42	2905	28	3262	41
CO860094	19	2587	43	2991	22	2241	40	5521	15	2568	42	3215	42
SCOUT66	2	2599	42	2101	41	2483	35	4489	37	3094	21	3045	43
CO860235	20	2303	44	2739	31	1859	45	5251	18	2735	38	3013	44
KHARKOF	1	1742	45	1699	45	1947	43	3761	45	2491	43	2357	45
MEAN		3392		2964		2674		5135		3089		3358	
LSD(.05)		419		1155		N.S.		1084		N.S.		372	
C.V.		10.7		18.5		17.9		16.0		20.2		15.7	

Table 4. Summary of mean yields (kg/ha) and ranks of 45 wheats grown in the Southern Regional Performance Nursery for 5 intra-regional production zones (after Peterson, 1992).

C.I. OR SEL. NO.	ENTRY NO.	SOUTH-CENTRAL PLAINS		NORTH-CENTRAL PLAINS		NORTHERN HIGH PLAINS		INTER-MOUNTAIN WEST		SOUTHERN HIGH PLAINS		REGIONAL AVERAGE	
No. of locations		9		2		3		5		5		25	
XH1497	37	3778	7	3333	12	3227	1	5975	3	3689	4	4089	1
HBC302E	25	3664	15	2728	32	3073	4	5649	12	3959	1	3959	2
XH1436	35	3864	2	3333	11	2612	30	5705	9	3336	12	3913	3
XH1437	36	3682	12	3165	20	3187	2	5774	7	3124	18	3879	4
OK89421	7	3504	23	3292	15	3072	5	5535	14	3477	6	3848	5
TX88A6533	17	3249	33	2898	25	2933	10	5726	8	3916	2	3846	6
KS84170E-8-3	24	3851	4	4094	1	2874	16	4918	31	3248	16	3829	7
KS89H48-1	27	3890	1	3674	4	2918	12	4474	38	3443	7	3798	8
OK89499	5	3768	9	3174	18	2859	18	5440	16	2939	27	3795	9
T21-3	43	3721	10	3493	8	2945	9	5208	20	3083	22	3783	10
T13	41	2910	40	2894	26	2930	11	6106	1	3678	5	3739	11
TX88A6480	16	3419	27	2597	36	2637	27	5968	4	3222	17	3730	12
TAM-107	3	2979	39	2618	35	3007	7	5891	6	3838	3	3729	13
TX88V5433	15	3827	6	3536	6	2668	25	4786	34	3299	15	3728	14
TX87V1613	12	3420	26	2682	34	2652	26	5663	10	3389	8	3711	15
W87-018	38	3829	5	3183	17	2733	22	4935	29	2849	32	3659	16
WI88-181	39	3679	13	2398	38	2449	36	5169	23	3377	10	3652	17
KSSB-369-7	22	3707	11	1851	44	2865	17	5241	19	3378	9	3647	18
TX88V4524	13	3612	17	2746	29	3037	6	4958	28	3124	19	3626	19
OK89399	6	3450	25	2886	27	2951	8	5198	21	3063	24	3621	20
NE88427	31	3185	36	3166	19	2810	20	5389	17	3319	13	3619	21
N87V106	29	3568	20	3643	5	2901	14	4501	36	3075	23	3589	22
TX89V4138	14	3587	19	2388	40	2196	41	5999	2	2654	41	3588	23
KS87H325-2	26	3655	16	3392	10	2509	34	4535	35	3344	11	3586	24
KS89H50-4	28	3775	8	3821	3	2571	32	4395	40	2891	30	3577	25
KS831374-142	23	3857	3	3837	2	2672	24	4064	44	2870	31	3550	26
NE88595	30	3279	31	3328	13	3114	3	5083	26	2833	34	3550	27
OK88W833	4	3678	14	2822	28	2914	13	5156	24	2297	45	3536	28
XH1319	34	3482	24	2391	39	2583	31	4926	30	3307	14	3527	29
T67	42	3372	29	3394	9	2768	21	5024	27	2815	36	3520	30
TX88V4635	11	3553	21	2964	23	2245	39	5657	11	2486	44	3517	31
NE88584	32	3161	37	3305	14	2855	19	5183	22	2725	39	3469	32
TX84V1418HF	9	3332	30	3282	16	2529	33	5112	25	2712	40	3447	33
C0870449	21	3118	38	2705	33	2252	38	5556	13	2895	29	3443	34
TX88V4636	8	3507	22	2484	37	2625	29	4847	33	2813	37	3414	35
TH901	44	3416	28	3107	21	2709	23	4459	39	3009	25	3408	36
TX88V5440	10	3602	18	3494	7	2186	42	4394	41	2846	33	3407	37
NE88588	33	3239	34	2929	24	2631	28	4313	43	2975	26	3311	38
WI88-028	40	3207	35	2099	42	1945	44	4902	32	3120	20	3294	39
C0860086	18	2733	41	2002	43	2262	37	5899	5	2817	35	3290	40
TH902	45	3278	32	2744	30	2888	15	4333	42	2905	28	3262	41
C0860094	19	2587	43	2991	22	2241	40	5521	15	2568	42	3215	42
SCOUT66	2	2599	42	2101	41	2483	35	4489	37	3094	21	3045	43
C0860235	20	2303	44	2739	31	1859	45	5251	18	2735	38	3013	44
KHARKOF	1	1742	45	1699	45	1947	43	3761	45	2491	43	2357	45
MEAN		3392		2964		2674		5135		3089		3358	
LSD(.05)		419		1155		N.S.		1084		N.S.		372	
C.V.		10.7		18.5		17.9		16.0		20.2		15.7	

Table 5. Summary of mean yields (kg/ha) and ranks for 21 wheats grown in the Southern Regional Performance Nursery at 23 sites in 1991 and 1992 with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PROSPER TEXAS		CHILLI-COTHE TEXAS		BUSHLAND (IRR.) TEXAS		BUSHLAND (DRYL.) TEXAS		TEXAS STATE MEAN	
Bulk Selection	KSSB-369-7	22	3392	11	4319	2	6621	2	3083	4	4354	1
TAM-108/Lancota	T21-3	43	3053	14	3375	12	6213	5	2902	7	3886	9
TAM-107	TAM-107	3	3005	15	3190	16	5971	12	3204	1	3843	11
TAM-200//TX38949-2/TAM-107	TX89V4138	14	3512	7	4352	1	6364	4	3151	2	4345	2
Karl Resel.	TX88V5433	15	3739	3	3231	15	5983	10	2604	15	3889	8
TAM-105/3/NE70654/BBY/Bow's'	TX87V1613	12	3542	6	3766	3	6084	8	2510	18	3975	6
NE78696/Payne	TX88V4524	13	3868	1	3569	5	6172	6	3125	3	4184	3
TX78V2154/Siouxland	TX88V4635	11	3593	5	3691	4	6662	1	2765	9	4178	4
Csm*3/3/Newton/Largo//2*Csm	OK88W833	4	3601	4	3345	13	6125	7	2614	14	3921	7
Arkan/Colt//Chisholm sib	NE88595	30	2672	16	3383	11	5959	13	2634	13	3662	14
HRW Hybrid	TH901	44	3408	10	3412	8	5410	18	2706	12	3734	12
Karl Resel.	TX88V5440	10	3814	2	3399	9	5499	17	2740	11	3863	10
Bennett/TAM-107	NE88427	31	2211	18	2941	20	5983	11	3025	5	3540	17
TX78V2154/Siouxland	TX88V4636	8	3412	9	3431	7	6490	3	2748	10	4020	5
Vona/TX71D4889-V3	TX84V1418HF	9	3446	8	3085	17	5659	15	2522	16	3678	13
2165/Vona	T67	42	3135	13	3391	10	5332	19	2313	19	3543	16
TX73165/Sandy	C0860086	18	1800	19	3022	19	6012	9	2986	6	3455	18
NE76667/Hawk	C0860094	19	1664	20	3085	17	5841	14	2513	17	3276	20
HRW Hybrid	TH902	45	3205	12	3448	6	5585	16	2176	20	3603	15
Scout 66	SCOUT66	2	2303	17	3322	14	4789	20	2798	8	3303	19
Kharkof	KHARKOF	1	1197	21	1960	21	3697	21	1543	21	2099	21
	MEAN		3027		3367		5831		2698		3731	
	LSD(.05)		670		N.S.		N.S.		484		654	
	C.V.		12.6		8.2		7.5		14.4		10.1	

Table 5. Continued.

C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		NORTH PLATTE NEBRASKA		NEBRASKA STATE MEAN		STILLWATER OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA		OKLAHOMA STATE MEAN		COLUMBIA MISSOURI	
KSSB-369-7	22	2144	18	3101	3	2622	13	2422	7	2910	5	6833	1	4055	2	2601	11
T21-3	43	2876	12	3192	1	3034	5	2926	1	2989	2	6644	2	4186	1	2735	10
TAM-107	3	3293	2	2821	9	3057	4	1732	18	2421	14	5846	17	3333	16	3261	1
TX89V4138	14	2407	15	2448	13	2427	14	2554	4	2590	8	6126	8	3756	8	2571	14
TX88V5433	15	3380	1	2999	6	3189	1	2509	6	3263	1	6126	7	3966	3	3110	2
TX87V1613	12	2569	14	2259	16	2414	15	2379	10	2124	18	5873	15	3459	13	2973	5
TX88V4524	13	3096	7	2426	14	2761	11	2306	11	2832	7	6360	4	3833	4	2312	19
TX88V4635	11	2396	16	2143	18	2270	17	2205	13	2954	3	6265	5	3808	6	2428	17
OK88W833	4	3063	9	2603	11	2833	10	2403	9	2526	11	6009	12	3646	11	3093	3
NE88595	30	3226	3	3045	5	3136	2	1917	16	2532	10	6243	6	3564	12	2746	8
TH901	44	3088	8	2973	7	3030	6	2806	2	2461	13	5858	16	3708	9	2742	9
TX88V5440	10	3185	4	2217	17	2701	12	2421	8	2929	4	6061	10	3804	7	2933	6
NE88427	31	3101	5	2690	10	2896	9	1733	17	2507	12	6003	13	3414	14	2522	15
TX88V4636	8	2087	19	2525	12	2306	16	2147	14	2859	6	6469	3	3825	5	2450	16
TX84V1418HF	9	2981	10	2829	8	2905	8	2237	12	2252	16	5579	18	3356	15	2594	12
T67	42	3100	6	3094	4	3097	3	2553	5	2542	9	4232	20	3109	19	3010	4
C0860086	18	2201	17	1968	19	2085	19	1731	19	2149	17	5924	14	3268	17	2348	18
C0860094	19	2951	11	1169	21	2060	20	1612	20	1800	19	6043	11	3152	18	2294	20
TH902	45	2844	13	3136	2	2990	7	2559	3	2416	15	6070	9	3681	10	2850	7
SCOUT66	2	1964	20	2270	15	2117	18	1959	15	1577	20	4641	19	2726	20	2584	13
KHARKOF	1	1821	21	1487	20	1654	21	1278	21	1180	21	3129	21	1862	21	1809	21
MEAN		2751		2543		2647		2209		2467		5825		3501		2665	
LSD(.05)		N.S.		N.S.		N.S.		636		N.S.		946		654		N.S.	
C.V.		18.0		22.3		20.1		13.0		10.9		7.2		9.5		12.6	

Table 5. Continued.

C.I. OR SEL. NO.	ENTRY NO.	CLOVIS (IRR.) NEW MEXICO		CLOVIS (DRYL.) NEW MEXICO		FARMINGTON NEW MEXICO		NEW MEXICO STATE MEAN		FORT COLLINS COLORADO		AKRON* COLORADO		JULESBURG COLORADO		WALSH COLORADO		COLORADO STATE MEAN	
KSSB-369-7	22	6238	2	1745	7	5114	5	4366	2	9070	2	3336	7	2579	10	2551	9	4733	3
T21-3	43	5425	6	2208	3	4559	14	4064	4	9302	1	3644	4	2852	4	2344	13	4832	2
TAM-107	3	6507	1	2398	2	5417	1	4774	1	8900	3	3715	3	2441	12	2729	2	4690	5
TX89V4138	14	3983	20	1676	10	5337	3	3665	10	8180	8	3904	1	2082	19	2710	4	4324	11
TX88V5433	15	5543	4	1625	11	4579	13	3916	6	6821	19	2903	16	2587	9	2223	15	3877	18
TX87V1613	12	6015	3	1679	9	5191	4	4295	3	8159	9	2816	18	2334	14	2567	8	4353	10
TX88V4524	13	4739	10	1932	6	3968	19	3546	15	8615	4	2986	13	2887	2	2580	7	4694	4
TX88V4635	11	4828	8	859	21	4335	16	3341	19	8329	7	3334	8	2331	15	2645	6	4435	8
OK88W833	4	4084	18	1225	19	5071	6	3460	18	7433	17	2753	19	1996	20	2163	18	3864	19
NE88595	30	4023	19	1976	5	4768	10	3589	11	7609	16	2989	12	2823	5	2768	1	4400	9
TH901	44	4896	7	1730	8	4015	18	3547	14	7838	11	2674	20	2781	6	2236	14	4285	12
TX88V5440	10	5513	5	1253	18	4362	15	3709	9	6981	18	3081	11	2612	7	2160	19	3918	17
NE88427	31	4728	11	2184	4	5037	7	3983	5	8135	10	3111	9	2884	3	2465	12	4495	7
TX88V4636	8	4576	14	1279	17	3796	21	3217	21	7623	15	3499	6	2205	18	2478	11	4102	14
TX84V1418HF	9	4463	16	1455	14	4687	12	3535	16	7683	14	2881	17	2292	17	2102	20	4026	16
T67	42	4479	15	1603	12	4312	17	3464	17	7797	12	2916	15	2454	11	2191	16	4148	13
CO860086	18	4222	17	1588	13	5394	2	3735	7	8454	6	3641	5	2317	16	2717	3	4496	6
CO860094	19	4600	12	1166	20	4971	8	3579	13	8562	5	3721	2	3398	1	2661	5	4874	1
TH902	45	4750	9	1305	16	4698	11	3585	12	7689	13	2974	14	2400	13	2170	17	4086	15
SCOUT66	2	3662	21	2651	1	4824	9	3712	8	6401	20	3096	10	2600	8	2504	10	3835	20
KHARKOF	1	4582	13	1394	15	3887	20	3288	20	4844	21	2113	21	1838	21	1982	21	2888	21
MEAN		4848		1663		4682		3731		7830		3147		2509		2426		4255	
LSD(.05)		N.S.		N.S.		N.S.		N.S.		N.S.		N.S.		N.S.		N.S.		N.S.	
C.V.		22.0		37.4		18.2		22.6		13.3		11.4		16.0		11.1		15.6	

* Not included in state or regional means.

Table 5. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	HUTCHINSON KANSAS		HAYS KANSAS		MANHATTAN KANSAS		COLBY* KANSAS		GARDEN CITY KANSAS		KANSAS STATE MEAN		ABERDEEN IDAHO		REGIONAL AVERAGE	
KSSB-369-7	22	2942	3	2832	14	2920	4	2753	17	2878	16	2893	3	8393	12	4033	1
T21-3	43	1918	12	3378	3	2688	9	2923	11	3217	6	2800	6	8907	11	3986	2
TAM-107	3	1395	16	3299	5	2284	15	3037	9	2956	12	2483	16	9650	6	3939	3
TX89V4138	14	2157	10	3310	4	2554	12	3245	1	3201	7	2806	5	10982	2	3916	4
TX88V5433	15	3084	2	2952	10	2864	6	3089	5	2946	13	2961	2	8019	13	3818	5
TX87V1613	12	2223	9	2572	19	2728	8	2411	19	2893	14	2604	13	9650	5	3814	6
TX88V4524	13	2371	7	2548	20	2586	10	2870	13	2820	18	2581	14	7833	14	3759	7
TX88V4635	11	1686	13	2614	17	2243	17	3058	8	3332	2	2469	17	10550	3	3755	8
OK88W833	4	2428	6	2933	11	2778	7	2922	12	2864	17	2751	9	10162	4	3739	9
NE88595	30	1259	18	3495	1	2275	16	3147	2	3555	1	2646	12	9390	9	3728	10
TH901	44	2315	8	2968	9	2950	3	3077	7	3106	9	2835	4	7237	18	3664	11
TX88V5440	10	2844	4	2573	18	3019	2	3080	6	2640	20	2769	7	7752	15	3662	12
NE88427	31	1602	14	3412	2	2306	13	3110	4	3314	3	2658	11	7664	16	3640	13
TX88V4636	8	1312	17	3152	7	2285	14	3125	3	3297	4	2512	15	9625	7	3631	14
TX84V1418HF	9	2775	5	2718	16	2888	5	2306	20	2661	19	2760	8	8922	10	3611	15
T67	42	3221	1	3012	8	3122	1	2615	18	3026	11	3095	1	7493	17	3591	16
CO860086	18	390	21	2854	13	1112	20	2851	14	3252	5	1902	20	11261	1	3510	17
CO860094	19	726	19	2802	15	1431	18	2770	16	3147	8	2027	19	9591	8	3430	18
TH902	45	2101	11	3294	6	2580	11	2819	15	2888	15	2716	10	.	.	3408	19
SCOUT66	2	1552	15	2933	11	1195	19	3016	10	3065	10	2186	18	6548	19	3150	20
KHARKOF	1	590	20	2248	21	679	21	2234	21	2312	21	1458	21	5850	20	2348	21
MEAN		1947		2948		2357		2879		3018		2567		8774		3637	
LSD(.05)		1032		512		894		N.S.		577		692		1865		311	
C.V.		14.8		8.3		18.7		7.1		8.6		12.4		12.5		15.6	

* Not included in state or regional means.

Table 6. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 45 entries in the 1992 Southern Regional Performance Nursery grown at 25 locations.

C.I. OR SEL. NO.	ENTRY NO.	25 SITE REGIONAL AVERAGE KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r^2)
XH1497	37	4089	1.11	0.98	0.97
HBC302E	25	3959	1.21	0.95	0.91
XH1436	35	3913	1.10	0.99	0.97
XH1437	36	3879	1.10	0.99	0.98
OK89421	7	3848	1.05	0.99	0.97
TX88A6533	17	3846	1.18	0.97	0.94
KS84170E-8-3	24	3829	0.93	0.95	0.91
KS89H48-1	27	3798	0.92	0.96	0.91
OK89499	5	3795	1.02	0.97	0.94
T21-3	43	3783	1.07	0.97	0.95
T13	41	3739	1.15	0.96	0.92
TX88A6480	16	3730	1.26	0.97	0.95
TAM-107	3	3729	1.21	0.97	0.95
TX88V5433	15	3728	0.96	0.97	0.94
TX87V1613	12	3711	1.15	0.98	0.96
W87-018	38	3659	0.99	0.97	0.94
WI88-181	39	3652	1.16	0.96	0.93
KSSB-369-7	22	3647	1.17	0.96	0.92
TX88V4524	13	3626	1.06	0.95	0.91
OK89399	6	3621	1.04	0.98	0.96
NE88427	31	3619	1.01	0.98	0.97
N87V106	29	3589	0.87	0.93	0.87
TX89V4138	14	3588	1.08	0.93	0.86
KS87H325-2	26	3586	0.87	0.95	0.91
KS89H50-4	28	3577	0.78	0.96	0.91
KS831374-142	23	3550	0.77	0.91	0.82
NE88595	30	3550	0.92	0.96	0.92
OK88W833	4	3536	0.98	0.95	0.90
XH1319	34	3527	1.01	0.98	0.97
T67	42	3520	0.93	0.97	0.93
TX88V4635	11	3517	1.09	0.95	0.90
NE88584	32	3469	0.76	0.92	0.85
TX84V1418HF	9	3447	0.99	0.98	0.96
CO870449	21	3443	1.00	0.97	0.94
TX88V4636	8	3414	0.95	0.95	0.91
TH901	44	3408	0.93	0.97	0.94
TX88V5440	10	3407	0.92	0.96	0.92
NE88588	33	3311	0.82	0.96	0.92
WI88-028	40	3294	1.05	0.96	0.92
CO860086	18	3290	1.12	0.94	0.88
TH902	45	3262	1.07	0.98	0.96
CO860094	19	3215	0.98	0.92	0.85
SCOUT66	2	3045	0.70	0.88	0.77
CO860235	20	3013	0.95	0.91	0.82
KHARKOF	1	2357	0.61	0.86	0.75

Table 7. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 21 entries in the 1991 and 1992 Southern Regional Performance Nursery grown at 21 locations.

C.I. OR SEL. NO.	ENTRY NO.	21 SITE REGIONAL AVERAGE KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r^2)
KSSB-369-7	22	4033	1.07	0.95	0.91
T21-3	43	3986	1.08	0.97	0.94
TAM-107	3	3939	1.13	0.97	0.94
TX89V4138	14	3916	1.13	0.96	0.92
TX88V5433	15	3818	0.87	0.95	0.90
TX87V1613	12	3814	1.10	0.98	0.96
TX88V4524	13	3759	1.00	0.95	0.91
TX88V4635	11	3755	1.15	0.97	0.94
OK88W833	4	3739	1.07	0.95	0.91
NE88595	30	3728	1.02	0.97	0.95
TH901	44	3664	0.87	0.97	0.94
TX88V5440	10	3662	0.89	0.95	0.90
NE88427	31	3640	0.95	0.96	0.92
TX88V4636	8	3631	1.05	0.97	0.94
TX84V1418HF	9	3611	0.99	0.98	0.96
T67	42	3591	0.84	0.95	0.90
CO860086	18	3510	1.24	0.96	0.92
CO860094	19	3430	1.13	0.94	0.88
TH902	45	3408	1.00	0.96	0.93
SCOUT66	2	3150	0.74	0.92	0.85
KHARKOF	1	2348	0.68	0.91	0.83

Table 8. Summary of agronomic and yield data for 45 wheats grown in the 1992 Southern Regional Performance Nursery.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %	LODGING %	STRAW STRENGTH 0-5	GREENLEAF DURATION 0-9
Number of locations			20	16	3	2	1	2
Quantum Hybrid Wheat	XH1497	37	81	125	56	21	2.5	7.6
TX71A889/2172//2157	HBC302E	25	78	127	61	10	1.5	7.1
Quantum Hybrid Wheat	XH1436	35	82	126	51	13	2	6.3
Quantum Hybrid Wheat	XH1437	36	87	127	51	25	3.5	8
OK83197/Sxl	OK89421	7	82	126	77	27	3.5	8
TX71A889/TAM-101	TX88A6533	17	72	128	79	11	2.5	8.3
Hawk/(Pkg16/Lov13//Jgw13)//TAM-108	KS84170E-8-3	24	80	127	66	12	2	4
Dular/Eagle//2*Cheney/Larned/3/Colt	KS89H48-1	27	83	128	79	27	3.5	6.3
Cty sib/4/Aiv/3/Tcs//TI sib/Sdy	OK89499	5	77	128	63	13	2.5	5.8
TAM-108/Lancota	T21-3	43	82	128	58	26	3	8.3
TAM-107/TAM-105	T13	41	78	129	54	20	3	9
Siouxland/TAM-101	TX88A6480	16	73	125	78	13	2.5	8.5
TAM-107	TAM-107	3	76	124	72	22	2	9
Karl Resel.	TX88V5433	15	76	126	64	21	2.5	4.8
TAM-105/3/NE70654/BBY/Bow's'	TX87V1613	12	81	125	72	16	2	7.3
Colt/Victory	W87-018	38	75	127	50	8	2.5	6.1
WI81-133/Arkan	WI88-181	39	71	121	34	20	2	8.3
Bulk Selection	KSSB-369-7	22	73	124	27	23	1.5	7.7
NE78696/Payne	TX88V4524	13	71	126	65	5	2	7.1
2165/Cty sib	OK89399	6	79	126	63	17	2.5	8.5
Bennett/TAM-107	NE88427	31	80	130	67	18	2.5	8.1
Complex Pedigree	N87V106	29	82	126	69	30	2.5	5.3
TAM-200//TX38949-2/TAM-107	TX89V4138	14	77	125	46	26	3.5	9
Complex Pedigree	KS87H325-2	26	80	125	66	17	2.5	7.4
Dular/Eagle//2*Cheney/Larned/3/Colt	KS89H50-4	28	85	128	58	23	5	6.8
Karl sib	KS831374-142	23	75	124	70	20	1.5	4.1
Arkan/Colt//Chisholm sib	NE88595	30	82	129	68	38	2	8.3
Csm*3/3/Newton/Largo//2*Csm	OK88W833	4	76	124	65	19	2	9
Quantum Hybrid Wheat	XH1319	34	82	125	51	21	2	8
2165/Vona	T67	42	84	125	44	20	2	7.3
TX78V2154/Siouxland	TX88V4635	11	77	126	51	19	4	8.3
Centura/Dawn//Colt sib	NE88584	32	89	128	72	36	3	6.8
Vona/TX71D4889-V3	TX84V1418HF	9	81	127	59	18	2.5	8
Arkan/Hawk	CO870449	21	77	127	60	27	1.5	7.8
TX78V2154/Siouxland	TX88V4636	8	77	127	55	31	2.5	8.6
HRW Hybrid	TH901	44	80	126	38	28	3.5	8
Karl Resel.	TX88V5440	10	73	124	76	18	2	5.7
Centura/Dawn//Colt sib	NE88588	33	86	129	64	23	2.5	8.5
W84-179/W81-171	WI88-028	40	68	127	37	9	1.5	8
TX73165/Sandy	CO860086	18	74	132	73	12	1.5	7.9
HRW Hybrid	TH902	45	81	126	44	23	.	9
NE76667/Hawk	CO860094	19	76	133	83	14	2.5	5.6
Scout 66	SCOUT66	2	93	131	75	56	4.5	8.3
Sandy/Hail	CO860235	20	75	133	68	7	1.5	6.8
Kharkof	KHARKOF	1	98	137	74	72	3.5	7.3

Table 8. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	LEAF RUST SEVERITY %	MILDEW 0-9	SEPTORIA NODORUM 0-9	BACTERIAL BLIGHT 0-5	ROOT ROT 0-5	BYD VIRUS %	VOLUME WEIGHT KG/HL	YIELD KG/HA
Number of locations		4	1	1	1	1	1	26	25
XH1497	37	63	2.3	5.7	2.3	0.3	25	74.8	4089
HBC302E	25	50	7.3	3.3	2.3	1.7	30	74	3959
XH1436	35	58	4.7	4.3	3	2.3	22	72.6	3913
XH1437	36	77	1.3	6	1.7	0.7	25	74.9	3879
OK89421	7	70	4.5	4.7	3	0	23	74.6	3848
TX88A6533	17	85	2.7	6	3	1.7	18	73.9	3846
KS84170E-8-3	24	7	0	7	1.7	1.7	23	74.6	3829
KS89H48-1	27	40	1.7	4.3	1	0.3	13	73.9	3798
OK89499	5	39	0	4	2	0.3	15	74.6	3795
T21-3	43	48	2.3	4.7	1.3	1	18	72.6	3783
T13	41	78	0	7.7	1.3	0	18	73	3739
TX88A6480	16	75	5	6.7	3.3	3	53	72.2	3730
TAM-107	3	90	0	7.3	1.3	1	38	73.8	3729
TX88V5433	15	29	0	4.3	2.3	1.7	25	73.8	3728
TX87V1613	12	28	4.3	6.7	2.3	1.7	22	73.9	3711
W87-018	38	28	2.3	5	2.3	1	27	74.3	3659
WI88-181	39	58	6	4.7	4.3	2	27	75	3652
KSSB-369-7	22	40	4.3	6	4	4	32	74.5	3647
TX88V4524	13	29	3.3	5	2.7	1.3	27	74.8	3626
OK89399	6	64	0.7	6.3	2	1.7	23	73.4	3621
NE88427	31	58	0	6	1.3	0	15	74.5	3619
N87V106	29	4	4	4.7	2.7	1.7	12	73.6	3589
TX89V4138	14	69	0	7	2	1	32	74.7	3588
KS87H325-2	26	48	1	4	1.7	1	25	75.2	3586
KS89H50-4	28	44	1.7	3.7	1	0.7	20	74.7	3577
KS831374-142	23	31	2.3	4.3	1.3	1	20	73	3550
NE88595	30	63	3.7	5.7	2	0.3	18	73.4	3550
OK88W833	4	71	0.7	4	2.3	1	23	75.4	3536
XH1319	34	63	3	5	3	1.3	25	73	3527
T67	42	49	3	3.7	2.3	1.3	23	74.7	3520
TX88V4635	11	63	1.7	5.3	2	2	33	71.8	3517
NE88584	32	51	1.7	5	3.3	1	30	74.1	3469
TX84V1418HF	9	50	5	4.7	3	1	40	74.3	3447
C0870449	21	60	4	7.7	3.3	3.3	17	72.3	3443
TX88V4636	8	75	2	7	2	1.3	37	72.3	3414
TH901	44	64	2	5.7	3.7	0.7	20	73.2	3408
TX88V5440	10	23	2	5	2	1.3	33	72.9	3407
NE88588	33	60	2.7	5.7	3.3	0.7	30	75.7	3311
WI88-028	40	49	0	8.3	2.3	1.7	27	73.6	3294
C0860086	18	56	1.7	7	2.3	0.7	22	71.7	3290
TH902	45	82	0	5.3	3	0.7	28	72.8	3262
C0860094	19	25	3.3	5.7	2	1	18	71.5	3215
SCOUT66	2	68	3.7	6	1.3	0.5	25	74.6	3045
C0860235	20	44	1.3	6.7	3.7	3	20	71.7	3013
KHARKOF	1	78	4	6.3	3	2.3	22	72.2	2357

Table 9.
Seedling reaction to entries of the 1992 Southern Regional Hard Red Winter Wheat Performance Nursery to selected isolates of Puccinia graminis f. sp. tritici. (by D.V. McVey, USDA-ARS,Cereal Rust Laboratory, U. of Minnesota, St. Paul, MN., 55108)

		Reaction Produced by Isolates							
		68- 41- 73A	72- 00- 1370C	69- 21- 399	72- 25- 635C	72- 00- 53A	72- 4- 1A	74- 21- 1409A	
No	Cult/Line	HNLQ	QFBS	QSHS	RKQS	RTQQ	TNMH	TNMK	Sr. Gene
1	Kharkof	X	S	S	S	S	S	S	none
2	Scout 66	S	S	S	S	;	;	S	17
3	TAM-107	2=	2-	2-	2=	2=	2=	2=	24
4	OK88W833	;1	S	S	S	S	S	S	5
5	OK89499*	2=	2=	2=	2=	2=	2=	2-	24
6	OK89399*	2=	2=	2	2=	2=	2-	2-	24
7	OK89421*	;,2=	2=,S	2,S	2=,S	2=,;	2=,;	S,2=	Seg 6,24
8	TX88V4636	0	2=	2-	2=	2=	2=	-	5,24
9	TX84V1418HF	2=	2-	2=	2-	2	2	23	24
10	TX88V5440	S	2-,S	2,S	2-	S,2-	S	S	+
11	TX88V4635	0	2=	2-	2=	2=	2=	2=	5,24
12	TX87V1613	2=	2=	2	2	23	2-	2-	24
13	TX88V4524	0	0;	S	S	S	0;	0;	5,6
14	TX89V4138	0	2=	2=	2=	2=	2=	2=	5,24
15	TX88V5433	23	2-	23	2	23	S	S	+
16	TX88A6480*	0;	S	S	S	S	S	S	5
17	TX88A6533*	0	;	S	S	0;	0;	;	5,6,17
18	CO860086	0	;	23	23	0;	0;	;	5,6,17,+
19	CO860094	0;	;	2-	2=	0;	0;	0;	5,6,17,+
20	CO860235*	0	0;	S	S	0;	0;	0;	5,6,17
21	CO870449*	2=	2=	2	2-	2=	2=	23	24
22	KSSB-369-7	0	S	S	S	0;	0;	S	5.17
23	KS831374-142*	S	S	S	S	2-	S	S	-
24	KS84170E-8-3*	0	0	2-	;	0;	0;	0;	5,6,7b,17
25	HBC302E*	2	2-	23	S	S	S	S	+
26	KS87H325-2*	0	0	2-	;1	;	0;	0;	5,6,17,+
27	KS89H48-1*	0	0;	2	2	;	0;	0;	5,6,17,+
28	KS89H50-4*	;1	S	S	S	;	0;	S	17
29	N87V106*	0	0	S	S	;	0;	0;	5,6,17
30	NE88595	0;	0,2=	2-CN	2	0;	0;	S	17,+
31	NE88427	0	0;	23	;1N	0;	0;	0;	5,6,17,+
32	NE88548*	0	0	S	S	0;	0;	0;	5,6,17
33	NE88588*	0	0	23	S	0;	0;	0;	5,6,17
34	XH1319*	;1-,S	;,2-	S	;1	;1,S	;1CN,S	XCN,S	Seg5,6,17
35	XH1436*	;1-	;	2	X	;1-,S	;1,S	;1,S	Seg5,6,17
36	XH1437*	0	2=	2-	2=	;	;1	2=	5,17,24
37	XH1497*	2	2-	2-	2-	S	S	S	+
38	W87-018*	0	0	2-	2=	0;	0;	0;	5,6,17,24
39	WI88-181*	2=	2=	2-	2=	0;	0;	23	17,24
40	WI88-028*	0	2=	2-	2=	0;	0;	2-	17,24
41	T13*	2=	2=	2-	;1	;1	2=	2-	24
42	T67	0;	0;	2	;1	0	0;	S	17,+
43	T21-3	0;	;	23	;	0	0;	S	17,+
44	TH901	;,S	0;	S	12,S	S	S,;	;,S	Seg 6
45	TH902	0;	0;	32	2-2	12CN	;,S	;,XCN	Seg 6,+
*	NEW ENTRY								

Table 10.
Adult plant field reaction of entries of the 1992 Uniform Southern Hard Red Winter Wheat Performance Nursery to leaf and stem rust at St. Paul, MN. (by D.V. McVey, Cereal Rust Lab. U. of MN., St. Paul, MN. 55108)

Entry No.	Cultivar/ Designator	Leaf rust 7/6/92	Stem rust 7/6/92
1	Kharkof	60S	TR
2	SCOUT 66	30MS-S	50S
3	TAM 107	60S	30MS-S
4	OK88W833	60S	60S
5	OK89499	10MS-S	TR
6	OK89399	20S	TR
7	OK89421	60S	5R
8	TX88V4636	60S	TR
9	TX84V1418HF	10MS-S	TR
10	TX88V5440	10MS-S	40S
11	TX88V4635	5MS-S	TR
12	TX87V1613	5MS-S	TR-MR
13	TX88V4524	5MS	TMR
14	TX89V4138	20S	5R
15	TX88V5433	10S	60S
16	TX88A6480	10S	60S
17	TX88A6533	60S	40S
18	C0860086	60S	10R-MR
19	CO860094	10S	TR
20	C0860235	60S	30MS-S
21	C0870449	10MS-S	TR
22	KSSB-369-7	20MS-S	20R
23	KS831374-142	40S	60S
24	KS84170E-8-3	5MS-S	TR
25	HBC302	0MS-S	60S
26	KS87H325-2	TMS-S	TR
27	KS89H48-1	5MS-S	20MR-MS
28	KS89H50-4	5MS-S	20MR-MS
29	N87V106	TMS-S	60S
30	NE88595	40S	TR
31	NE88427	60S	TR
32	NE88584	TMS-S	TR
33	NE88588	10S	TR
34	XH1319	TMS-S	30S
35	XH1436	TMS-S	20S
36	XH1437	TMS-S	TMR
37	XH1497	30S	40S
38	W87-018	5MS-S	TR-MR
39	WI88-181	10MS-S	TMR-MS
40	WI88-028	5MS-S	TR-MR
41	T13	60S	30MR-MS
42	T67	TMS-S	30MS-S
43	T21-3	40S	30MS-S
44	TH901	20S	40S
45	TH902	30S	20MR-MS

Table 11. Hessian fly reaction, Great Plains biotype, for entries in the 1992 Southern Regional Performance Nursery. Data provided by J. H. Hatchett, USDA-ARS, Manhattan, KS.

C.I. OR SEL. NO.	ENTRY NO.	HESSIAN FLY REACTION TYPE	HESSIAN FLY NO. OF PLANTS RES.	HESSIAN FLY NO. OF PLANTS SUSC.
KHARKOF	1	S	0	21
SCOUT66	2	S	0	25
TAM-107	3	S	0	26
OK88W833	4	S	0	24
OK89499	5	S	0	23
OK89399	6	S	3	17
OK89421	7	S	0	24
TX88V4636	8	S	0	26
TX84V1418HF	9	S	0	20
TX88V5440	10	S	0	26
TX88V4635	11	S	0	23
TX87V1613	12	S	0	24
TX88V4524	13	S	0	26
TX89V4138	14	S	0	24
TX88V5433	15	S	0	26
TX88A6480	16	S	0	23
TX88A6533	17	S	0	19
CO860086	18	S	0	26
CO860094	19	S	0	23
CO860235	20	S	0	17
CO870449	21	H	14	5
KSSB-369-7	22	S	0	28
KS831374-142	23	S	0	20
KS84170E-8-3	24	S	1	23
HBC302E	25	R	24	1
KS87H325-2	26	S	0	21
KS89H48-1	27	H	18	5
KS89H50-4	28	R	20	3
N87V106	29	S	0	23
NE88595	30	H	16	5
NE88427	31	S	0	24
NE88584	32	H	10	11
NE88588	33	S	0	22
XH1319	34	S	0	26
XH1436	35	S	0	19
XH1437	36	S	1	22
XH1497	37	S	0	23
W87-018	38	S	0	23
WI88-181	39	R	18	2
WI88-028	40	S	0	20
T13	41	S	0	20
T67	42	H	5	19
T21-3	43	S	2	26
TH901	44	S	0	21
TH902	45	S	1	18
NEWTON			0	89

Table 12. Aluminum tolerance of lines tested in the 1992 SRPN based on hematoxylin staining of seedling roots. (Data provided by B.F. Carver, Stillwater, OK)

Entry No.	Selection No.	Stain Intensity[a] Al Concentration (mM) 0.18	0.36	0.72	Rating[b]
1	Kharkof	C	C	C	VS
2	Scout 66	C	C	C	VS
3	TAM 107	C	C	C	VS
4	OK88W833	P	C	C	MS
5	OK89499	C	C	C	VS
6	OK83399	P	C	C	MS
7	OK89421	P+	C	C	MS
8	TX88V4636	C	C	C	VS
9	TX84V1418HF	P	C	C	MS
10	TX88V5440	C	C	C	VS
11	TX88V4635	C	C	C	VS
12	TX87V1613	C	C	C	VS
13	TX88V4524	P	C	C	MS
14	TX89V4138	C	C	C	VS
15	TX88V5433	C	C	C	VS
16	TX88A6480	P	P+/C	C	MS-I*
17	TX88A6533	P	C	C	MS
18	C0860086	N	P-	P	T
19	C0860094	N	P-	P	T
20	C0860235	C	C	C	VS
21	C0870449	C	C	C	VS
22	KSSB-369-7	P-	P-	P+/C	I-T*
23	KS831374-142	C	C	C	VS
24	K584170E-8-3	N	P	P+	T
25	HBC302E	P+	C	C	MS
26	KS87H325-2	C	C	C	VS
27	KS89H48-1	P/C	C	C	VS-MS*
28	KS89H50-4	C	C	C	VS
29	N87V106	P-/C	P-/C	P+/C	VS-T*
30	NE88595	P	P+/C	C	MS-I*
31	NE88427	C	C	C	VS
32	NE88584	N	P-	P	T
33	NE88588	P+	C	C	MS
34	XH1319	P-	C/P-	C	MS-I*
35	XH1436	P	P+/C	C	MS-I*
36	XH1437	C	C	C	VS
37	XH1497	P-	P	C	I
38	W87-018	C	C	C	VS
39	WI88-181	P-	P+/C	C	MS-I*
40	WI88-029	P-	P	C	I
41	T13	C	C	C	VS
42	T67	P-	C	C	MS
43	T21-3	C	C	C	VS
44	TH901	P+/N	C	C/P	VS-T*
45	TH902	C	C	C	VS

[a]C, P, and N = complete, partial, and no staining of root tips, respectively; P- and P+ indicate light and dark intensity, respectively, of partial staining.

[b]VS = very susceptible, MS = moderately susceptible, I = intermediate and T = tolerant ($\leq$ 0.72 mM Al); * = heterogeneous response; predominant stain intensity listed first for each Al concentration.

Table 13a. Mean coleoptile length of seedlings from seed of the 45 entries in the 1992 Southern Regional Performance Nursery grown on dryland at Bushland and Chillicothe, TX, mean seed weight, and regional mean plant height. Data, except for plant height, provided by K. B. Porter, Professor Emeritus, Texas A&M University Research and Extension Center, Amarillo-Bushland, TX.

C.I. or Sel. No.	Entry No.	Coleoptile length: Chillicothe, TX	Coleoptile length: Bushland TX	Coleoptile length: 2 site 1992 Mean	Coleoptile length: 4 site 1991-92 Mean	Two-site Mean Wt. of 16 seed planted	Regional Mean Plant Height
		mm				mg	cm
CI13996	2	116	104	110	105	388	93
CI1442	1	104	116	110	107	392	98
NE88588	33	105	103	104		408	86
NE88584	32	99	97	98		416	89
KS84170E-8-3	24	94	89	92		491	80
TX88V4635	11	91	81	86	85	418	77
T13	41	89	83	86		378	78
OK89399	6	86	84	85		496	79
PI495594	3	86	83	85	80	455	76
HBC302E	25	85	83	84		452	78
T67	42	82	85	84	82	442	84
TX88V4636	8	88	80	84	83	386	77
TH901	44	87	80	84	81	482	80
XH1319	34	80	83	82		505	82
XH1436	35	86	75	81		476	82
W87-018	38	82	80	81		423	75
TX84V1418HF	9	87	73	80	82	408	81
TX89V4138	14	84	76	80	79	398	77
TX902	45	79	80	80	79	447	81
WI88-028	40	78	82	80		443	68
NE88427	31	80	78	79	79	404	80
TX88V5433	15	82	74	78	78	402	76
TX88A6533	17	81	74	78		407	72
OK88W833	4	83	73	78	79	469	76
KS87H325-2	26	76	78	77		510	80
KS89H48-1	27	76	76	76		420	83
N87V106	29	76	72	74		442	82
CO870449	21	75	70	73		399	77
TX87V1613	12	78	67	73	69	425	81
OK89499	5	74	72	73		429	77
XH1437	36	73	69	71		394	87
OK89421	7	74	67	71		404	82
CO860235	20	76	66	71		365	75
CO860094	19	75	66	71	71	343	76
TX88A6480	16	75	64	70		468	73
TX88V5440	10	70	67	69		396	73
WI88-181	39	72	63	68		400	71
T21-3	43	67	66	67	65	366	82
KS89H50-4	28	67	66	67		398	85
NE88595	30	69	65	67	66	359	82
XH1497	37	69	65	67		439	81
KS831374-142	23	69	63	66		444	75
CO860086	18	63	62	63	65	337	74
TX88V4524	13	64	58	61	61	321	71
KSSB-369-7	22	47	68	58	68	490	73
Mean		80	76	78	78	421	
LSD(.05)				9	6	98	
CV				5.7	5.3	12	

* Hybrids were evaluated using F_2 seed.

Table 13b. Correlation of coleoptile length of 1992 SRPN entries from two seed sources, mean seed weight, and mean plant height over locations.

	Coleoptile length			Two-site
	Chillicothe, TX	Bushland TX	2 site 1992 Mean	Mean Wt. of 16 seed planted
r value, coleoptile length and weight of planted seed	0.05	0.29	0.17	
probability > r	0.73	0.05	0.29	
r value, coleoptile length and weight of seed planted with mean plant height	0.55	0.63	0.61	-0.002
probability > r	0.0001	0.0001	0.0001	0.99

Table 14. Reaction of entries in the 1992 Southern Regional Performance Nursery to Wheat Streak Mosaic Virus. Data provided by J. Martin, Hays, KS.

C.I. OR SEL. NO.	ENTRY NO.	WHEAT STREAK MOSAIC REACTION REP 1	WHEAT STREAK MOSAIC REACTION REP 2
KHARKOF	1	S	S
SCOUT66	2	S	S
TAM-107	3	MS	MS
OK88W833	4	MS	S
OK89499	5	MS	S
OK89399	6	MS	MS
OK89421	7	MS	MS
TX88V4636	8	MS	MS
TX84V1418HF	9	S	S
TX88V5440	10	S	S
TX88V4635	11	S	S
TX87V1613	12	S	S
TX88V4524	13	MS	S
TX89V4138	14	MR	MR
TX88V5433	15	MS	MR
TX88A6480	16	MS	MS
TX88A6533	17	MS	MS
CO860086	18	MS	MS
CO860094	19	MR	MR
CO860235	20	S	S
CO870449	21	S	S
KSSB-369-7	22	MS	S
KS831374-142	23	MS	MR
KS84170E-8-3	24	-	-
HBC302E	25	MR	MS
KS87H325-2	26	S	S
KS89H48-1	27	S	S
KS89H50-4	28	MS	S
N87V106	29	MS	S
NE88595	30	S	S
NE88427	31	MS	MS
NE88584	32	S	S
NE88588	33	S	S
XH1319	34	MS	MR
XH1436	35	MR	MS
XH1437	36	MR	MR
XH1497	37	MR	MS
W87-018	38	S	S
WI88-181	39	S	MS
WI88-028	40	MS	MR
T13	41	S	S
T67	42	MR	MR
T21-3	43	MS	MR
TH901	44	S	S
TH902	45	S	MS
TAM-107		MS	MS
NEWTON		MS	MS
KS87H123		MR	MR
TOMAHAWK		S	VS
LARNED		S	S

Table 15. Reaction of entries in the 1992 Southern Regional Performance Nursery to WSBMV. Data provided by Robert M. Hunger and John L. Sherwood, Plant Pathology Department, Oklahoma State University, Stillwater, OK. Information on methods is presented with the Uniform Soilborne Mosaic Nursery results later in this report.

		Visual (0-3)			ELISA		
	Selection	Rep 1	Rep 2	Rep 3	Rep 1	Rep 2	Rep 3
1	CI1442	3	2	3	0.557	0.525	0.591
2	CI13996	2	1	2	0.451	0.011	0.900
3	PI495594	2	2	2	0.268	0.291	0.876
4	OK88W833	2	3	3	0.246	0.710	0.877
5	OK89499	1	1	1	0.009	0.019	0.813
6	OK89399	1	0	1	0.007	0.001	0.002
7	OK89421	2	2	2	0.006	0.699	0.796
8	TX88V4636	3	2	3	0.740	0.634	0.542
9	TX84V1418HF	2	2	2	0.881	0.549	0.583
10	TX88V5440	2	0	1	0.002	0.001	0.010
11	TX88V4635	3	3	3	0.700	0.607	0.621
12	TX87V1613	3	3	3	0.422	0.850	0.532
13	TX88V4524	3	2	2	0.585	0.733	0.487
14	TX89V4138	3	3	3	0.627	0.751	0.872
15	TX88V5433	1	0	1	0.014	0.029	0.002
16	TX88A6480	2	2	2	0.733	0.455	0.731
17	TX88A6533	2	2	seg	0.660	0.550	1.015
18	CO860086	3	2	2	0.694	0.532	0.839
19	CO860094	3	2	2	0.851	0.723	0.787
20	CO860235	3	3	seg	0.474	0.425	0.813
21	CO870449	2	2	0	0.004	0.014	0.013
22	KSSB-369-7	2	2	1	0.006	0.013	0.008
23	KS831374-142	1	1	0	0.005	0.064	0.700
24	KS84170E-8-3	0	2	0	0.007	0.001	0.001
25	HBC302E	0	2	1	0.010	0.499	0.004
26	KS87H325-2	2	3	2	0.706	0.549	1.031
27	KS89H48-1	1	3	2	0.034	0.001	0.011
28	KS89H50-4	seg	3	1	0.012	0.000	0.009
29	N87V106	1	3	3	0.541	0.516	0.246
30	NE88595	2	3	2	0.689	0.578	0.817
31	NE88427	3	3	3	0.739	0.594	0.525
32	NE88548	2	2	2	0.842	0.763	0.637
33	NE88588	1	3	2	0.808	0.581	0.492
34	XH1319	1	1	1	0.044	0.016	0.009
35	XH1436	1	seg	2	0.503	0.723	0.004
36	XH1437	1	1	2	0.024	0.004	0.625
37	XH1497	0	1	2	0.012	0.166	0.427
38	W87-018	1	2	2	0.803	0.611	0.487
39	WI88-181	2	2	2	0.011	0.006	0.017
40	WI88-028	0	1	1	0.010	0.002	0.001
41	T13	1	2	3	0.878	0.721	0.728
42	T67	2	2	2	0.441	0.465	0.636
43	T21-3	0	0	2	0.022	0.006	0.519
44	TH901	0	0	2	0.018	0.001	0.401
45	TH902	seg	1	1	0.835	0.001	0.003

Table 16. Reaction of entries in the 1992 SRPN to Tan Spot. Data provided by C. Kent Evans and Robert M. Hunger, Plant Pathology Department, Oklahoma State University, Stillwater, OK.

Rank[w]	Entry No.	Sel. No.	Mean Lesion Lengths (mm) Test 1[x]	Test 2[y]	Mean[z]
1	Chk	Red Chief	0.65	1.49	1.21
2	10	TX88V5440	0.44	1.92	1.43
3	23	KS8313374-142	0.68	1.98	1.54
4	15	TX88V5433	1.19	1.76	1.57
5	24	KS84170E-8-3	1.07	2.12	1.77
6	42	T67	2.30	2.46	2.41
7	31	NE88427	1.75	2.75	2.42
8	22	KSSB-369-7	1.47	2.94	2.45
9	Chk	Agrotricum	1.92	2.74	2.46
10	34	XH1319	2.44	2.62	2.56
11	32	NE88584	2.69	2.54	2.59
12	19	C0860094	3.08	2.53	2.71
13	44	TH901	2.39	2.90	2.73
14	43	T21-3	2.40	2.92	2.75
15	38	W87-018	2.93	2.67	2.76
16	3	TAM-107	2.64	2.84	2.77
17	45	TH902	2.85	2.82	2.83
18	4	OK88W833	2.91	2.80	2.84
19	2	Scout 66	2.66	2.93	2.84
20	6	OK89399	2.96	2.83	2.87
21	40	WI88-028	3.05	2.80	2.89
22	25	HBC302E	3.09	2.85	2.93
23	39	WI88-181	2.98	2.94	2.95
24	37	XH1497	2.83	3.02	2.96
25	30	NE88595	3.81	2.56	2.98
26	26	KS87H325-2	2.11	3.42	2.99
27	8	TX88V4636	2.69	3.15	3.00
28	41	T13	2.67	3.23	3.05
29	35	XH1436	2.98	3.12	3.06
30	16	TX88A6480	3.20	3.00	3.07
31	13	TX88V4524	2.81	3.27	3.12
32	36	XH1437	3.16	3.11	3.12
33	7	OK89421	2.98	3.24	3.15
34	18	C0860086	2.86	3.31	3.17
35	5	OK89499	3.38	3.07	3.17
36	14	TX89V4138	2.68	3.45	3.20
37	9	TX84V1418HF	3.54	3.03	3.20
38	20	C0860236	3.23	3.19	3.20
39	33	NE88588	2.88	3.53	3.32
40	17	TX88A6533	2.98	3.52	3.34
41	27	KS89H48-1	3.13	3.49	3.37
42	28	HS89H50-4	3.24	3.49	3.41
43	Chk	TAM-105	3.34	3.75	3.61
44	12	TX87V1613	3.82	3.58	3.66
45	1	Kharkof	3.71	3.69	3.70
46	11	TX88V4635	3.36	3.89	3.72
47	29	N87V106	4.77	3.68	4.04
48	21	C0870449	4.22	4.06	4.11
Mean			2.73	2.99	2.90
LSD (0.05)			1.06	0.90	0.71
C.V.			19.30	21.80	21.40

[w]Rankings are from the combined analysis of the two tests.
[x]Mean lesion length values were computed over two replications.
[y]Mean lesion lengths were computed over four replications.
[z]Mean lesion length values from the combined analysis.

Table 16 - Methods: Seedling reaction to Tan Spot. C. K. Evans and R. M. Hunger, Oklahoma State University.

The reaction of the 1992 SRPN to tan spot of wheat caused by Pyrenophora tritici-repentis (PTR) was determined in two tests conducted in the greenhouse. Three genotypes were included to serve as resistant and susceptible checks. These were 'Red Chief' (resistant), 'Agrotricum' (OK906, resistant), and 'TAM 105' (susceptible). Ten seeds of each entry were planted as a clump in soil contained in wooden flats. Flats were planted in a randomized complete block design with two replications in the first test and four replications in the second test. The inoculum consisted of equal amounts of conidia produced from three single ascospore isolates of PTR. These isolates were obtained from naturally infested straw collected in 1991 from different wheat producing regions of Oklahoma. Each isolate produces abundant quantities of conidia in vitro and causes the typical lesions associated with the tan spot disease. In the first test, seedlings were inoculated when the first leaf was fully expanded. In the second test, seedlings were inoculated when the third leaf was fully expanded. Seedlings were inoculated with a conidial suspension (1000 conidia/ml + 1 drop of Tween 20/100 ml) using a DeVilbiss sprayer (model # 5601D) until incipient runoff. Following inoculation, plants were allowed to dry for one hr and then placed in a mist chamber that provided near 100% relative humidity. After 24 hr in the mist chamber plants were placed on greenhouse benches. The length of the largest lesion that occurred in the middle 50% of the first leaf (first test) or third leaf (second test) was determined after eight days using a dial caliper with an accuracy range of ± 0.05 mm. One measurement was made on four separate leaves from each clump of plants. Measurements were made from the border of the visible edge of the chlorotic or necrotic lesions longest dimension which generally was oriented parallel with the leaf axis. Statistical analyses were conducted on the mean of the four measurements made per entry.

1992

Northern Regional Performance Nursery

Entry No.	Variety or Pedigree	Sel. No.	Source
1**	Kharkof	CI1442	Check
2**	Roughrider	CI17439	"
3**	Colt	PI476975	"
4	Brule/Dawn	SD88201	So. Dakota
5	TX78V3630/Lco	SD88137	"
6	Rri/Siouxland	SD88171	"
7*	Brule/Dawn	SD88185	"
8*	Lco/Frd//NE69559/Wnk/3/Nell	SD87143	"
9*	Brule/Dawn	SD88191	"
10*	Bennett/Rose	SD89271	"
11*	Bennett/Dawn	SD89204	"
12*	NAPB 80300/Centurk 78	SD89102	"
13	Wnk/SD6914//Siouxland	ND8844	No. Dakota
14	Mvr/KS79397//Nsr/3/Siouxland	ND8892	"
15*	Nsr/3/Mnt/NB68466//SD76705	ND8930	"
16*	Nsr/4/Ctk//Wnk/Uln/3/SD76694	ND8933	"
17*	Seward sib/NE80413	ND8944	"
18*	Seward/SD76705	ND8955	"
19*	Bnz//Frd/Lcr/3/Bnz/Mrt-2	ND89142	"
20	T. Diccocoides/Brule//Arkan	NE88536	Nebraska
21*	Colt*2/Chisholm	NE87513	"
22*	Siouxland/NE7060	NE89479	"
23*	TX80GH2679/Brule seln.	NE89522	"
24*	Lancota seln/Sxld//TX792729	NE89526	"
25*	Brule/3/Parker*4/Agent//Bel. 198/Lancer	NE89657	"
26*	Quantum Hybrid Wheat	XNH1597	HybriTech
27*	" "	XNH1598	"
28*	" "	XNH1605	"
29*	" "	XNH1629	"
30*	Msc/Ctk A+//lul	MT8713	Montana
31*	Rri/MT6928	MT8719	"
32*	Winalta/Bezostaya	W-193	Alberta
33*	" "	W-198	"
34*	" "	W-236	"

* New Entry
** New Seed Provided

TEST SITE INFORMATION - NRPN

Nebraska stations -- See information for SRPN.

Brookings, SD -- Abandoned.

Pierre, SD -- Seeded no-till into lentil stubble on 9/10/91 with fair moisture. A good stand was established and there was no winterkilling. A freeze at flowering reduced yields in early genotypes. Wet conditions at harvest, with harvest on 7/27/92.

Winner, SD -- Seeded on 9/9/91 in fallow ground with fair moisture. Hot, dry winds in September and October depleted moisture in the root zone and reduced stands. Winter was mild and spring warm. A freeze at flowering reduced yield in early genotypes. Harvested on 7/17/91 under wet conditions.

Casselton, ND -- The nursery was planted on 9/16/91 in fallow ground fertilized for a 60 bu/a yield goal. Adequate moisture was present except for May during the jointing stage. June was very wet and temperatures were unseasonably cool during grain fill. Moderate leaf rust and minimal stem rust were present. Harvested 8/7/92.

Carrington, ND -- Planted on 9/12/91 with adequate fall moisture. Some stand loss occurred due to warm temperatures in January that melted snow cover. Extremely dry spring and summer conditions. Harvested 7/23/92.

Williston, ND -- The growing season was highlighted by a very mild winter with early spring warming. The growing season was cool with near normal precipitation. January and February averaged about 15 degrees F above the long term monthly averages. March and April were mild with above normal precipitation in April. May and June were near normal in temperature and precipitation, but last June and July were cool. Maximum daily temperatures did not exceed 89 degrees F in July.

Waseca, MN -- The growing season was wet and cool. Considerable winterkilling occurred in some plots, affecting yields. May until the first week of June was dry and warmer than normal. Rest of the season was relatively cool with adequate moisture.

Rosemount, MN -- The growing season was similar to Waseca, except for very dry conditions in May with 30+ days without rain. The nursery appeared very stressed. Rain and cool weather in June contributed to tillering and excellent yield potential. There was good leaf rust development and mildew. Planted 9/16/91 and harvested 7/17/92.

Sheridan, WY -- Stands were reduced due to dry fall conditions.

Archer, WY -- Trial was affected by dry spring conditions and downy brome.

Moccasin, MT -- Planted on 9/19/91 with good emergence. Fertilizer applied was 50 lbs/a 18-46-0 with seed and 60 lbs/a N preplant urea. Fall through mid-spring was warm and dry. Nursery was treated for Russian Aphids on 10/12/91 and 6/7/92. Wheat experienced severe stress in mid-May through mid-June. High N levels caused robust growth with the early spring weather and hastened moisture depletion. Heads were damaged by 27 degrees F temperature on May 24.

Sidney, MT -- Planted on 9/28/91 into fallow with 140 lbs/a available soil N. Rainfall from September to August was 21.86 inches compared to the long term average of 13.64 inches. The summer was unusually cool and wet which contributed to good grain yields.

Bozeman, MT -- Mild winter with little or no evidence of winter damage. Early spring and timely rains through the season contributed to taller plant heights and weaker straw with substantial lodging resulting.

Aberdeen, ID -- No additional information provided.

Lind, WA -- See information for SRPN.

Table 17. Yield and agronomic data for 34 wheats in the Northern Regional Performance Nursery in 1992.

LINCOLN

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEVERITY 0-9
ND8944	17	4510	75.3	99	152	1.5
NE89526	24	4480	77.7	84	143	4
SD88137	5	4369	77	100	145	3.5
SD87143	8	4339	77.9	91	144	6.5
NE89657	25	4322	76	90	146	3.5
SD89271	10	4274	79.5	88	142	3
ND8844	13	4052	77.1	107	151	7.5
ND8955	18	4041	73.8	95	148	1
SD89204	11	4004	75.1	90	146	4
COLT	3	3980	74.6	76	141	8.5
SD88201	4	3892	80.4	94	148	6.5
NE89522	23	3833	74.4	90	143	8
ND8892	14	3832	76.6	103	152	7.5
SD89102	12	3796	77.9	103	150	7.5
XNH1605	28	3794	74.8	95	146	8
ND8933	16	3685	76.2	102	152	2
NE88536	20	3662	74.7	97	144	4.5
NE89479	22	3657	75.2	88	140	8.5
NE87513	21	3565	75.1	84	143	8.5
ROUGHRIDER	2	3497	78.4	105	151	8.5
XNH1629	29	3478	75.3	85	148	7.5
ND8930	15	3425	77.8	107	152	4.5
SD88185	7	3417	78.9	90	142	5
ND89142	19	3412	76.5	104	153	3.5
SCOUT66	1	3372	77.9	102	143	8.5
SD88171	6	3359	75.2	97	142	7.5
SD88191	9	3356	74.9	84	149	6
XNH1598	27	3088	75.7	81	141	9
XNH1597	26	3030	76.2	80	142	7
MT8719	31	2376	73.5	84	150	9
W-193	32	2276	72	97	153	5
W-198	33	2274	78	100	153	6.5
W-236	34	2222	71.6	98	149	4
MT8713	30	2213	74.7	75	149	9
MEAN		3555				
LSD(.05)		719				
C.V.		12.4				

NORTH PLATTE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
NE87513	21	4525	78.7	84
SD89102	12	4321	82.4	103
NE88536	20	4218	78.3	94
ND8955	18	4120	77.7	90
ND8944	17	4071	80	99
ND8844	13	3898	81.5	104
ROUGHRIDER	2	3869	79.7	107
SD88201	4	3740	82.7	93
SD89204	11	3699	78.9	88
NE89479	22	3666	80.1	93
SCOUT66	1	3640	78.6	104
NE89657	25	3632	78.6	86
SD88171	6	3630	80	103
XNH1605	28	3595	81	86
SD88137	5	3474	79.5	94
XNH1598	27	3347	80.9	83
MT8719	31	3328	80.8	84
ND8892	14	3319	80	112
XNH1629	29	3263	81.5	89
ND8933	16	3242	79.6	105
NE89526	24	3180	78.6	86
ND89142	19	3094	81.7	110
SD88185	7	2933	80.6	85
MT8713	30	2925	81	77
W-193	32	2912	80.8	105
W-236	34	2905	81.3	100
XNH1597	26	2870	80	80
COLT	3	2796	80	74
SD88191	9	2736	80.8	72
SD89271	10	2718	82.6	88
NE89522	23	2689	79.7	86
W-198	33	2467	81.1	112
ND8930	15	2307	80.9	113
SD87143	8	2224	80.1	86
MEAN		3334		
LSD(.05)		1073		
C.V.		19.7		

HEMINGFORD

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
XNH1629	29	4978	83.3	67
XNH1605	28	4809	81.7	71
ND8844	13	4765	81.5	65
ND8892	14	4567	81.4	69
NE89522	23	4217	79.5	76
ND8944	17	4182	78.9	69
SD89204	11	4151	81.4	70
SD89102	12	3995	82	67
SD88185	7	3989	83.3	71
SD88171	6	3983	81.1	80
ND8955	18	3978	78.7	70
SCOUT66	1	3956	80.9	79
SD87143	8	3909	82	71
NE89479	22	3873	80.1	76
ROUGHRIDER	2	3767	79.2	72
ND89142	19	3750	81.7	66
NE88536	20	3741	77.9	70
SD88201	4	3740	82.7	69
XNH1597	26	3734	80.5	69
ND8933	16	3723	77.7	69
XNH1598	27	3676	80.4	65
W-198	33	3670	80.6	65
NE89657	25	3644	78.3	65
SD89271	10	3583	83.9	65
W-236	34	3531	81.5	69
MT8713	30	3492	80.4	64
MT8719	31	3475	80.2	65
SD88137	5	3435	81.4	72
W-193	32	3427	81	71
SD88191	9	3242	81.8	58
NE89526	24	3214	79.9	65
COLT	3	3207	79.6	61
ND8930	15	3152	81.3	74
NE87513	21	3039	78.9	66
MEAN		3812		
LSD(.05)		582		
C.V.		9.3		

PIERRE

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1
XNH1629	29	3062	76.4	146
ND8930	15	2966	74.6	149
XNH1605	28	2582	76	146
MT8719	31	2580	73.7	149
ND8844	13	2390	74.2	148
NE89522	23	2325	75.9	144
SD89102	12	2298	76.6	148
ND89142	19	2237	76.4	148
ROUGHRIDER	2	2094	74.6	148
XNH1598	27	2060	76.2	145
SD88191	9	2035	75.7	145
NE89657	25	2004	73.1	144
SD89204	11	1883	74.8	145
ND8892	14	1872	74.8	148
SD89271	10	1863	76	143
ND8933	16	1811	71.5	148
SD87143	8	1791	74.2	146
ND8944	17	1778	70.6	149
W-236	34	1710	73.3	147
W-193	32	1708	75.7	148
SD88201	4	1533	75.5	147
NE89479	22	1455	71.5	143
MT8713	30	1453	73.8	146
SD88171	6	1439	75.3	144
NE89526	24	1430	72.6	145
COLT	3	1412	73.5	143
ND8955	18	1397	69.7	147
SD88137	5	1374	71.5	145
XNH1597	26	1258	72.4	144
W-198	33	1110	72.9	149
SD88185	7	1027	74.8	145
NE87513	21	953	72.4	144
SD89188	35	939	74.8	145
SCOUT66	1	865	76.2	144
SD89104	36	738	71.9	145
NE88536	20	715	70.4	147
MEAN		1726		
LSD(.05)		957		
C.V.		33.9		

WINNER

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %
ND8844	13	5133	77.7	147	100
XNH1629	29	4712	79.3	146	100
SD89102	12	4414	79.3	146	90
ND8933	16	4210	76.8	148	100
ND8930	15	4143	77.8	148	97
ROUGHRIDER	2	4134	78	147	100
SD88191	9	4125	76.2	145	100
W-236	34	3979	78	147	100
SD87143	8	3972	77.7	147	90
SD88171	6	3970	77.1	144	100
NE89522	23	3883	78	143	83
ND8955	18	3867	74.8	147	93
SD88201	4	3723	78.4	148	93
ND89142	19	3629	78.2	147	87
SD89188	35	3623	77.5	144	100
SD88137	5	3618	76.4	146	93
NE89479	22	3600	75.7	142	97
XNH1605	28	3600	78.6	145	83
ND8892	14	3598	76	148	90
ND8944	17	3519	78.2	149	77
MT8719	31	3493	78.2	148	87
W-198	33	3459	76.8	149	83
SD89271	10	3419	78.6	144	97
SD88185	7	3380	78.2	145	77
SCOUT66	1	3369	76.2	144	87
MT8713	30	3212	76.9	146	80
W-193	32	3201	78.4	147	83
NE89657	25	3154	76.4	144	77
XNH1598	27	3111	78.9	145	87
NE89526	24	2966	77.5	145	73
SD89204	11	2963	74.9	147	73
XNH1597	26	2950	78.8	145	77
COLT	3	2914	77.8	142	80
NE88536	20	2782	75.1	147	67
SD89104	36	2535	76.4	144	73
NE87513	21	2295	76.9	145	63
MEAN		3574			
LSD(.05)		1117			
C.V.		19.1			

CASSELTON

N. DAKOTA

TWO REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %
SD88137	5	4284	77.1	91	164	77
NE89657	25	4271	78	90	161	92
ND8944	17	4124	73.9	95	166	92
ND8933	16	4047	71.9	110	167	95
SD87143	8	3972	75.3	93	165	83
ND8955	18	3863	74.7	90	165	95
ND8930	15	3760	74.8	107	167	95
NE89479	22	3626	70.5	87	159	88
NE89522	23	3478	74.8	89	161	83
SD88171	6	3395	72.7	102	163	80
ND8892	14	3377	71.6	100	167	93
SD89102	12	3375	75.2	102	166	82
NE89526	24	3098	75.8	83	162	82
ND8844	13	2997	68.3	102	167	90
ND89142	19	2889	75.3	112	166	88
XNH1605	28	2864	67.3	95	165	90
SD88201	4	2817	77.6	94	166	75
NE88536	20	2748	70.6	88	164	88
SD88185	7	2730	73.7	85	164	55
ROUGHRIDER	2	2696	72.9	106	166	93
SD88191	9	2379	70	79	165	63
SD89204	11	2335	68.2	87	166	63
SCOUT66	1	2330	74.5	91	162	75
NE87513	21	2315	71.4	81	161	87
XNH1629	29	2148	66.9	86	166	87
COLT	3	2011	67	74	163	73
SD89271	10	1910	72.5	75	161	58
W-236	34	1706	59.8	100	166	88
MT8719	31	1664	62.1	87	167	95
W-193	32	1658	62.1	108	167	83
MT8713	30	1653	64.4	77	166	90
W-198	33	1537	63.1	102	168	92
XNH1598	27	1092	63.3	77	165	45
XNH1597	26	872	64.7	80	165	45
MEAN		2765				
LSD(.05)		949				
C.V.		16.8				

CARRINGTON

N. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %	LODGING 0-9
ND8933	16	2603	77.9	66	162	90	2
SD87143	8	2103	82	56	160	85	2
ND8955	18	2092	78.4	56	162	87	2
SD88171	6	2077	79.8	64	159	82	3
MT8713	30	2048	75.9	53	161	83	1
ROUGHRIDER	2	1989	77.9	55	163	90	2
ND8930	15	1963	71.8	66	162	78	1
ND89142	19	1959	77.3	60	161	78	2.5
SD88191	9	1921	77.6	52	162	80	2
ND8892	14	1873	74.2	63	162	77	1.5
NE89479	22	1808	78.3	60	158	87	2.5
W-193	32	1804	77.2	66	162	78	3
NE87513	21	1707	77.9	56	159	73	2
ND8944	17	1649	70.9	60	162	63	2
NE89526	24	1530	79.1	56	159	58	3
SD89102	12	1504	79.9	60	163	68	1.5
W-198	33	1472	72.7	68	164	72	1.5
ND8844	13	1461	73.2	58	162	55	2.5
NE89657	25	1404	75.5	51	160	78	2
SD88201	4	1387	73.5	51	162	62	1.5
SCOUT66	1	1307	80.7	57	159	78	2
SD88137	5	1303	77.7	63	160	58	1.5
SD89204	11	1251	73.5	52	162	67	1
XNH1629	29	1242	75.7	60	164	45	1
SD89271	10	1146	78.7	53	158	68	2
SD88185	7	1112	78.5	50	161	60	3
W-236	34	1092	68.7	60	162	67	1.5
XNH1597	26	1065	76.2	56	161	52	2
NE88536	20	1013	73.9	59	161	55	1.5
COLT	3	956	78.4	53	161	45	2
MT8719	31	947	75.6	46	163	52	1.5
NE89522	23	926	73.1	51	160	55	3
XNH1598	27	874	73.3	46	161	42	2
XNH1605	28	838	67.7	50	162	45	2
MEAN		1513					
LSD(.05)		906					
C.V.		36.7					

WILLISTON

N. DAKOTA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %	LEAF RUST SEV. %	LEAF RUST RESP. 0-9	TAN SPOT %
XNH1629	29	3967	80.8	65	160	69	7		8
NORSTAR	35	3928	82	87	164	89	1		14
ND8844	13	3651	78.7	77	162	75	4		15
XNH1605	28	3627	80.8	66	159	68	9		18
ND8944	17	3611	78.7	75	162	59	0		15
SEWARD	36	3518	80.8	73	159	81	6		19
ND8930	15	3382	80.9	80	162	80	5		19
ND8933	16	3367	80.6	74	162	79	1		23
ROUGHRIDER	2	3351	81.7	74	161	92	2		18
ND8955	18	3314	78.4	71	162	56	1		15
W-198	33	3301	79.6	82	163	56	9		18
MT8719	31	3233	81.8	62	161	78	15		20
MT8713	30	3211	80.9	54	160	78	10		20
W-193	32	3176	79.5	85	163	50	2		18
W-236	34	3125	79.5	75	161	54	1		15
ND8892	14	3087	77.4	78	162	50	6		13
SD88201	4	3044	80.2	67	160	68	3		18
ND89142	19	3025	79.6	77	162	60	1		18
SD88171	6	3005	80	74	159	79	4		14
SD89102	12	2947	80.5	71	161	70	5		15
SD88191	9	2942	77.4	56	160	44	7		18
SD87143	8	2868	78.9	66	158	60	5		14
NE89479	22	2858	80.2	71	156	75	5		18
SD88137	5	2801	79.9	72	159	69	0		24
XNH1598	27	2730	78	59	159	35	10		18
NE89522	23	2627	78.8	68	158	35	13		20
NE88536	20	2529	77.9	66	159	56	9		23
SD89271	10	2479	82.2	66	154	69	5		16
XNH1597	26	2371	78.8	61	158	44	10		18
SD89204	11	2344	76.6	63	160	34	3		18
SCOUT66	1	2286	79.7	76	157	51	7		19
NE89657	25	2259	76.5	66	160	35	1		13
NE89526	24	1957	78.2	64	159	38	1		12
NE87513	21	1853	78.8	62	156	21	10		20
SD88185	7	1847	78.3	63	159	15	9		10
COLT	3	1734	78.4	57	158	23	13		18
MEAN		2927							
LSD(.05)		491							
C.V.		11.9							

WASECA

MINNESOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-9
ND8844	13	4820	78	80	159	2.7
NE89657	25	4749	78.7	75	157	2.7
XNH1605	28	4536	78.7	78	159	3.3
SD88185	7	4453	77.4	84	160	2.7
ND8892	14	4403	77.4	93	159	3.3
NE89522	23	4326	78	73	157	3
NE89526	24	4261	77.4	80	159	3
ROUGHRIDER	2	4253	78	80	158	2.7
ND8933	16	4191	78	81	160	3.3
SD88171	6	4105	78	85	156	3
ND89142	19	4099	79.3	88	159	3
ND8955	18	4028	77.4	75	159	3.7
SD89102	12	3989	77.4	78	159	3.3
XNH1597	26	3964	78.7	78	158	2.7
COLT	3	3929	78	79	158	3
ND8930	15	3873	75.5	80	160	3
MT8713	30	3840	78.7	70	160	2
SD88137	5	3796	78	86	157	4.3
SD88191	9	3788	78	85	159	3
MT8719	31	3753	77.4	73	158	2.3
SD87143	8	3736	76.8	88	158	2.7
XNH1598	27	3534	77.4	73	157	3.3
ND8944	17	3501	78	81	160	5
W-193	32	3400	76.8	78	160	3
W-198	33	3288	78	82	159	4
NE87513	21	3226	77.4	74	157	3.3
NE88536	20	3183	76.1	80	159	3.7
SCOUT66	1	3133	77.4	86	160	5.7
XNH1629	29	3115	78	77	160	2.7
SD89271	10	2976	77.4	78	160	5
SD88201	4	2758	78	73	158	3.3
NE89479	22	2497	78.7	76	159	2
SD89204	11	2486	74.8	76	159	4.7
W-236	34	1261	76.1	73	161	3.7
MEAN		3684				
LSD(.05)		N.S.				
C.V.		33.6				

ROSEMOUNT

MINNESOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	LODGING 0-9	WINTER SURVIVAL %	LEAF RUST SEV. %	LEAF RUST RESP. 0-9	MILDEW 0-5
ND8955	18	5140	77.4	156	6	99	10	8	3
SD87143	8	4835	77.4	155	2.7	100	8	5	1
XNH1597	26	4654	77.4	153	3.7	86	70	8	2
XNH1598	27	4613	78	155	2	82	80	8	3
ND8944	17	4573	76.8	157	3	94	1	2	2
NE89479	22	4539	77.4	154	6.7	72	60	8	3
NE89526	24	4519	78.7	154	1.3	89	50	8	2
SD88191	9	4486	78	155	1	100	70	8	2
NE89657	25	4425	78	154	3	90	30	8	1
W-193	32	4409	79.3	156	4.3	100	30	8	2
NE89522	23	4407	76.8	153	4	67	70	8	2
SD88201	4	4347	80.6	156	4.3	78	15	5	2
ND8933	16	4268	76.8	158	3	89	1	2	4
SD89271	10	4248	79.3	152	4.7	97	10	8	4
NE88536	20	4237	76.1	153	4	80	20	8	3
XNH1605	28	4208	76.1	155	2	96	70	8	4
ND89142	19	4138	78.7	158	2	98	10	8	2
NE87513	21	4129	76.8	156	4.3	81	60	8	2
COLT	3	4113	78	152	2	83	60	8	2
SD89102	12	4066	79.3	157	6.3	97	8	5	2
SD89204	11	4064	76.1	154	4.3	91	1	2	3
MT8719	31	4017	79.3	156	1.7	95	90	8	4
XNH1629	29	3992	76.1	157	1.7	88	90	8	2
SD88171	6	3979	78	155	5.7	80	50	8	2
MT8713	30	3923	78	156	1	97	90	8	4
ND8844	13	3921	78	156	3.7	78	8	5	3
ND8892	14	3912	78	156	4	89	8	5	3
W-236	34	3851	78.7	156	5	91	20	8	4
SD88185	7	3842	79.3	153	4.3	85	40	8	2
W-198	33	3636	78	158	5.7	97	35	8	3
ROUGHRIDER	2	3519	78	156	4	100	25	8	2
SD88137	5	3490	78	155	7	89	10	5	1
SCOUT66	1	3293	77.4	153	9	99	70	8	2
ND8930	15	3208	78.7	159	2	100	1	2	4
MEAN		4147							
LSD(.05)		658							
C.V.		9.7							

SHERIDAN

WYOMING

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
XNH1605	28	2338	81.5	67	157
NE89657	25	2145	79.5	68	154
ND8955	18	2040	77.7	74	157
XNH1629	29	1849	82.2	63	158
SD88171	6	1822	79.1	82	156
NE89522	23	1800	77	66	153
ND8944	17	1796	80.4	73	159
ND8844	13	1677	79.3	78	161
SD88201	4	1666	81.5	69	157
W-198	33	1661	81	83	159
SD88185	7	1630	79.6	69	155
XNH1598	27	1630	80.9	56	154
W-236	34	1598	81.4	77	158
NE89526	24	1580	80.2	66	155
SD89102	12	1569	80.9	74	158
SD88191	9	1551	81.4	56	155
ROUGHRIDER	2	1533	80.9	75	160
SD87143	8	1450	80	63	156
ND8933	16	1450	78.4	73	162
ND89142	19	1432	79.6	77	159
COLT	3	1430	80.4	58	157
ND8892	14	1385	80.2	78	162
SD88137	5	1367	81	71	155
MT8713	30	1365	82.2	53	160
ND8930	15	1358	80.4	74	160
MT8719	31	1356	81.8	59	159
W-193	32	1356	80.6	81	159
SD89204	11	1316	79.1	62	158
SCOUT66	1	1311	77.5	71	153
NE89479	22	1298	78.9	75	152
SD89271	10	1296	83.3	62	152
NE88536	20	1282	76.4	69	156
XNH1597	26	1184	78.7	60	154
NE87513	21	1105	78.7	62	152
MEAN		1548			
LSD(.05)		573			
C.V.		22.7			

ARCHER

WYOMING

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	STAND %
NE89522	23	1199	73	149	90
W-198	33	1148	77.1	159	90
XNH1605	28	1134	67	153	87
XNH1629	29	1125	75.3	154	81
ND8844	13	1116	77.4	157	88
ND8892	14	1114	76.2	158	85
COLT	3	1089	75.1	149	88
SD88201	4	1072	77.5	154	89
SD88171	6	1047	73.8	151	85
SD88185	7	1024	76.8	150	73
XNH1598	27	995	72.8	150	90
SD89102	12	944	77	156	85
W-193	32	935	74.6	158	83
ROUGHRIDER	2	910	76.4	156	83
NE88536	20	897	72.1	152	85
ND8944	17	894	75.9	157	83
SD88191	9	863	75.7	154	87
SD89271	10	847	79.3	150	93
ND8955	18	845	74.2	156	78
ND89142	19	843	75.1	158	84
SCOUT66	1	796	74.8	149	87
NE89479	22	780	72.9	149	95
MT8719	31	764	77.1	157	80
W-236	34	733	77.4	154	88
SD88137	5	726	74.4	150	96
NE89526	24	720	73.1	149	87
SD87143	8	717	74.7	153	84
NE87513	21	713	74.4	149	88
ND8933	16	708	75.1	157	83
NE89657	25	668	70.2	150	90
MT8713	30	666	77.1	156	88
SD89204	11	646	73.1	151	88
ND8930	15	614	75.7	158	91
XNH1597	26	567	70	150	72
MEAN		878			
LSD(.05)		N.S.			
C.V.		36.7			

MOCCASIN

MONTANA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
XNH1629	29	2479	78.2	59	153
XNH1605	28	2358	79.1	61	153
NE89522	23	2058	75.9	60	149
W-236	34	1946	75.8	60	155
XNH1598	27	1939	78	52	152
SD89271	10	1849	77.7	57	152
W-198	33	1601	74.8	63	161
SD87143	8	1506	72.7	55	153
ND8844	13	1482	76.1	52	159
SD89204	11	1410	71.4	47	154
W-193	32	1401	76.2	61	158
SD88171	6	1316	75.5	64	155
SD88185	7	1235	73.4	57	153
SD88137	5	1228	72.9	58	153
SCOUT66	1	1168	74	58	152
SD89102	12	1134	76.3	53	159
ND89142	19	1085	75.3	63	159
ND8933	16	1031	74.5	54	158
NE89526	24	1031	73.9	64	153
XNH1597	26	1029	74.1	53	152
ND8944	17	984	74	61	158
COLT	3	975	71.6	47	152
MT8713	30	975	73.1	56	155
ND8892	14	944	74.8	60	157
SD88201	4	942	75.7	54	155
NE88536	20	901	71.2	59	154
NE89479	22	901	74.5	54	153
ROUGHRIDER	2	809	75.1	61	158
MT8719	31	782	75.8	56	157
ND8930	15	742	75.8	58	158
NE89657	25	702	71.2	55	152
NE87513	21	664	72	53	151
SD88191	9	603	74	48	153
ND8955	18	547	69.1	54	156
MEAN		1228			
LSD(.05)		479			
C.V.		23.9			

SIDNEY

MONTANA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %
XNH1605	28	7217	82.4	74	160	69
ND8955	18	6907	80.6	83	162	64
XNH1629	29	6839	83.2	76	161	64
ND8944	17	6710	82.1	86	164	49
SD89102	12	6459	82.4	88	163	41
ND8844	13	6355	80.9	91	163	61
W-236	34	6170	80.9	91	162	59
SD89204	11	6145	80.9	73	162	46
SD88201	4	6126	83	83	162	50
SD88137	5	6063	80.8	79	160	64
ND8933	16	6040	80.1	97	164	61
MT8713	30	6009	82.6	69	162	65
XNH1598	27	5973	82.5	69	159	53
W-193	32	5938	81.3	86	163	69
SD88191	9	5929	82.7	67	162	51
SD88185	7	5914	82.4	70	160	38
ND89142	19	5914	81.6	89	164	65
SD89271	10	5901	83.1	74	159	49
ND8892	14	5896	81.1	91	163	65
ROUGHRIDER	2	5888	81.6	89	163	68
ND8930	15	5845	81.4	86	164	63
W-198	33	5835	81.3	94	165	68
NE89522	23	5712	80.9	72	160	30
NE89657	25	5614	80.9	74	161	39
MT8719	31	5582	81.9	77	162	61
SD88171	6	5385	80.8	86	160	61
NE88536	20	5346	79.2	76	160	61
XNH1597	26	5252	81.7	70	160	39
SD87143	8	5221	80.4	77	160	55
NE89479	22	5108	79.2	78	159	46
COLT	3	5045	81.9	65	160	33
NE87513	21	4968	81.3	74	160	35
SCOUT66	1	4927	80.7	81	159	63
NE89526	24	4744	80.4	72	160	41
MEAN		5852				
LSD(.05)		985				
C.V.		12.0				

BOZEMAN

MONTANA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-9
XNH1605	28	8520	81.2	104	156	6.5
XNH1629	29	8084	80.5	96	158	5.5
SD88191	9	7615	80.2	88	156	4.5
ND8944	17	7247	81.5	117	160	6.5
XNH1597	26	7235	80.8	95	154	2
XNH1598	27	7171	81.5	94	153	2
W-193	32	7015	81	123	162	2.5
SD88185	7	6981	82.9	111	154	6
NE89479	22	6952	81.2	113	155	3.5
NE89522	23	6867	80.8	105	152	5
NE88536	20	6811	81	112	154	5.5
NE89657	25	6696	80.2	101	155	5
COLT	3	6667	81.4	83	153	2
SD89204	11	6627	80.5	105	156	6
MT8713	30	6621	82.3	89	158	1.5
NE87513	21	6567	81.5	100	151	3.5
MT8719	31	6551	81.6	102	160	4
SD87143	8	6358	81.4	113	156	4
ND8955	18	6214	81.1	111	156	6
ND8844	13	6163	81.1	117	161	5.5
SD88137	5	6047	81.5	116	156	5
SD88201	4	6010	82.7	110	157	5
SD89102	12	5896	81.1	118	159	7
NE89526	24	5891	80	97	155	2.5
W-198	33	5738	80.8	124	162	7
SD89271	10	5730	82.4	104	153	5.5
W-236	34	5716	81.3	118	159	6.5
ND8892	14	5688	80.2	118	159	6.5
SD88171	6	5596	80.8	122	157	5
ND89142	19	5586	81	125	159	4.5
ROUGHRIDER	2	5193	81.7	119	159	6
ND8930	15	4929	80.6	121	160	4.5
ND8933	16	4847	81.3	117	161	7
SCOUT66	1	4829	80.9	117	152	7
MEAN		6372				
LSD(.05)		742				
C.V.		8.3				

ABERDEEN

IDAHO

TWO REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-9	STRAW STRENGTH 0-5	STAND %
XNH1629	29	7582	81.7	107	150	1	3.5	88
NE89522	23	7287	80.4	102	146	1	4	100
SD89204	11	7155	80	97	150	1	4	90
XNH1605	28	6715	80.5	97	145	1	3.5	85
COLT	3	6527	80.2	71	149	1	3.5	88
SD88137	5	6395	80.2	117	148	1	4	90
W-193	32	6207	81.1	117	152	1	3.5	90
W-198	33	6053	80	112	154	1	4	85
SD89102	12	6009	81.1	81	148	2	3.5	95
SD89271	10	6005	82.8	76	147	1	4	90
XNH1597	26	5948	80	66	147	1	4	83
MT8713	30	5908	81.5	76	148	1	2	98
NE89657	25	5760	79.7	97	149	1	3	93
NE88536	20	5750	78	112	149	1	2	85
ND8844	13	5736	77.4	97	152	1.5	3.5	95
NE89479	22	5736	80.2	102	147	1	3	100
SD88185	7	5673	81.1	102	147	1	3.5	88
NE87513	21	5662	80	91	146	1	3.5	90
SD88191	9	5642	79.2	81	146	1	3.5	95
SD88171	6	5578	79.7	71	146	1	3.5	95
ND8944	17	5461	78.3	122	152	1	3	85
XNH1598	27	5367	79.2	69	148	1	4	83
BLIZZARD	35	5128	79.3	112	152	1	2	90
NE89526	24	5071	77.4	91	145	1	3	98
MT8719	31	5054	81	94	152	1	3	90
ND89142	19	4946	77.4	122	147	1	3.5	95
ND8930	15	4879	78.4	109	152	1	3	93
ROUGHRIDER	2	4751	79.3	107	147	1	3.5	95
ND8955	18	4734	77.7	86	151	1	4	88
SCOUT66	1	4701	80	86	146	1	3.5	100
W-236	34	4657	79.7	122	150	1	4	88
SD88201	4	4563	79.1	112	150	1	4	88
ND8892	14	4563	78.3	107	150	1	3	93
ND8933	16	4116	77.4	112	150	1	3.5	83
SD87143	8	3988	78.7	91	148	1	3.5	93
MEAN		5580						
LSD(.05)		1859						
C.V.		16.3						

LIND

WASHINGTON

TWO REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	STAND %
SD88185	7	1519	75.1	75	135	57
W-198	33	1514	75.2	79	141	70
W-193	32	1506	74.4	80	141	73
ND8844	13	1460	73.1	75	141	67
XNH1597	26	1431	73.9	69	136	53
SD88171	6	1395	73.5	83	136	67
XNH1629	29	1369	74.9	68	140	53
NE89479	22	1354	74.3	76	136	60
XNH1605	28	1346	72.5	73	138	67
XNH1598	27	1341	75.3	66	135	53
SD88137	5	1339	73.3	81	136	47
SD89204	11	1329	70.8	71	140	40
SD88201	4	1320	76.4	70	140	67
SCOUT66	1	1307	74.3	74	136	63
NE88536	20	1290	70.4	72	137	63
W-236	34	1279	75.1	74	140	63
COLT	3	1275	73.5	68	137	40
ND8944	17	1272	73.1	78	141	67
ND8892	14	1263	73	74	142	80
ND8955	18	1207	71	64	140	50
MT8713	30	1201	76.5	64	142	43
ND8930	15	1161	74.6	69	142	67
MT8719	31	1146	74.8	65	144	43
SD87143	8	1144	72.9	70	138	43
ROUGHRIDER	2	1139	73.7	75	142	53
ND8933	16	1129	71.6	77	144	60
SD89271	10	1123	77.4	75	137	53
ND89142	19	1075	72.6	79	143	33
SD89102	12	1049	74.7	75	143	57
NE89522	23	1001	71.7	75	137	20
NE87513	21	921	73	67	138	27
NE89526	24	897	73.5	67	140	17
NE89657	25	864	71.7	71	140	10
SD88191	9	489	70.8	66	142	10
MEAN		1219				
LSD(.05)		272				
C.V.		13.7				

Table 18. Summary of mean yields (kg/ha) of 34 wheats grown in the 1992 Northern Regional Performance Nursery at 17 locations with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		NORTH PLATTE NEBRASKA		HEMING-FORD NEBRASKA		NEBRASKA STATE MEAN	
Quantum Hybrid Wheat	XNH1605	28	3794	15	3595	14	4809	2	4066	3
Quantum Hybrid Wheat	XNH1629	29	3478	21	3263	19	4978	1	3906	7
Wnk/SD6914//Siouxland	ND8844	13	4052	7	3898	6	4765	3	4238	2
Seward sib/NE80413	ND8944	17	4510	1	4071	5	4182	6	4254	1
TX80GH2679/Brule seln.	NE89522	23	3833	12	2689	31	4217	5	3580	19
Seward/SD76705	ND8955	18	4041	8	4120	4	3978	11	4046	4
NAPB 80300/Centurk 78	SD89102	12	3796	14	4321	2	3995	8	4038	5
Brule/3/Pkr*4/Agent//Bel. 198/Lcr	NE89657	25	4322	5	3632	12	3644	23	3866	10
TX78V3630/Lco	SD88137	5	4369	3	3474	15	3435	28	3759	12
Rri/Siouxland	SD88171	6	3359	26	3630	13	3983	10	3657	16
Mvr/KS79397//Nsr/3/Siouxland	ND8892	14	3832	13	3319	18	4567	4	3906	8
Nsr/4/Ctk//Wnk/Uln/3/SD76694	ND8933	16	3685	16	3242	20	3723	20	3550	20
Lco/Frd//NE69559/Wnk/3/Nell	SD87143	8	4339	4	2224	34	3909	13	3491	22
Bennett/Dawn	SD89204	11	4004	9	3699	9	4151	7	3951	6
Brule/Dawn	SD88191	9	3356	27	2736	29	3242	30	3111	28
Siouxland/NE7060	NE89479	22	3657	18	3666	10	3873	14	3732	13
Roughrider	ROUGHRIDER	2	3497	20	3869	7	3767	15	3711	14
Bnz//Frd/Lcr/3/Bnz/Mrt-2	ND89142	19	3412	24	3094	22	3750	16	3419	24
Brule/Dawn	SD88185	7	3417	23	2933	23	3989	9	3446	23
Brule/Dawn	SD88201	4	3892	11	3740	8	3740	18	3791	11
Quantum Hybrid Wheat	XNH1598	27	3088	28	3347	16	3676	21	3370	25
Winalta/Bezostaya	W-193	32	2276	31	2912	25	3427	29	2872	33
Nsr/3/Mnt/NB68466//SD76705	ND8930	15	3425	22	2307	33	3152	33	2961	30
Bennett/Rose	SD89271	10	4274	6	2718	30	3583	24	3525	21
T. Diccocoides/Brule//Arkan	NE88536	20	3662	17	4218	3	3741	17	3874	9
Msc/Ctk A+//Iul	MT8713	30	2213	34	2925	24	3492	26	2876	32
Lancota seln/Sxld//TX792729	NE89526	24	4480	2	3180	21	3214	31	3625	18
Rri/MT6928	MT8719	31	2376	30	3328	17	3475	27	3060	29
Colt	COLT	3	3980	10	2796	28	3207	32	3328	26
Winalta/Bezostaya	W-198	33	2274	32	2467	32	3670	22	2804	34
Quantum Hybrid Wheat	XNH1597	26	3030	29	2870	27	3734	19	3211	27
Colt*2/Chisholm	NE87513	21	3565	19	4525	1	3039	34	3710	15
Winalta/Bezostaya	W-236	34	2222	33	2905	26	3531	25	2886	31
SCOUT 66	SCOUT66	1	3372	25	3640	11	3956	12	3656	17
	MEAN		3555		3334		3812		3567	
	LSD(.05)		719		1073		582		813	
	C.V.		12.4		19.7		9.3		14.0	

Table 18. Continued.

C.I. OR SEL. NO.	ENTRY NO.	SIDNEY MONTANA		MOCCASIN MONTANA		BOZEMAN MONTANA		MONTANA STATE MEAN		WILLISTON N. DAKOTA		CASSELTON N. DAKOTA		CARRINGTON N. DAKOTA		NORTH DAKOTA STATE MEAN	
XNH1605	28	7217	1	2358	2	8520	1	6032	1	3627	3	2864	16	838	34	2443	16
XNH1629	29	6839	3	2479	1	8084	2	5801	2	3967	1	2148	25	1242	24	2452	15
ND8844	13	6355	6	1482	9	6163	20	4667	10	3651	2	2997	14	1461	18	2703	10
ND8944	17	6710	4	984	21	7247	4	4980	4	3611	4	4124	3	1649	14	3128	2
NE89522	23	5712	23	2058	3	6867	10	4879	5	2627	24	3478	9	926	32	2344	19
ND8955	18	6907	2	547	34	6214	19	4556	12	3314	8	3863	6	2092	3	3089	3
SD89102	12	6459	5	1134	16	5896	23	4496	15	2947	18	3375	12	1504	16	2608	14
NE89657	25	5614	24	702	31	6696	12	4337	22	2259	30	4271	2	1404	19	2645	12
SD88137	5	6063	10	1228	14	6047	21	4446	17	2801	22	4284	1	1303	22	2796	7
SD88171	6	5385	26	1316	12	5596	29	4099	28	3005	17	3395	10	2077	4	2825	6
ND8892	14	5896	19	944	24	5688	28	4176	27	3087	14	3377	11	1873	10	2779	8
ND8933	16	6040	11	1031	18	4847	33	3973	30	3367	6	4047	4	2603	1	3339	1
SD87143	8	5221	29	1506	8	6358	18	4362	19	2868	20	3972	5	2103	2	2981	5
SD89204	11	6145	8	1410	10	6627	14	4728	7	2344	28	2335	22	1251	23	1977	25
SD88191	9	5929	15	603	33	7615	3	4716	8	2942	19	2379	21	1921	9	2414	18
NE89479	22	5108	30	901	26	6952	9	4320	23	2858	21	3626	8	1808	11	2764	9
ROUGHRIDER	2	5888	20	809	28	5193	31	3964	31	3351	7	2696	20	1989	6	2679	11
ND89142	19	5914	16	1085	17	5586	30	4195	26	3025	16	2889	15	1959	8	2625	13
SD88185	7	5914	16	1235	13	6981	8	4710	9	1847	33	2730	19	1112	26	1896	30
SD88201	4	6126	9	942	25	6010	22	4359	20	3044	15	2817	17	1387	20	2416	17
XNH1598	27	5973	13	1939	5	7171	6	5028	3	2730	23	1092	33	874	33	1565	33
W-193	32	5938	14	1401	11	7015	7	4785	6	3176	12	1658	30	1804	12	2212	21
ND8930	15	5845	21	742	30	4929	32	3839	33	3382	5	3760	7	1963	7	3035	4
SD89271	10	5901	18	1849	6	5730	26	4493	16	2479	26	1910	27	1146	25	1845	31
NE88536	20	5346	27	901	27	6811	11	4353	21	2529	25	2748	18	1013	29	2097	24
MT8713	30	6009	12	975	22	6621	15	4535	13	3211	11	1653	31	2048	5	2304	20
NE89526	24	4744	34	1031	19	5891	24	3889	32	1957	31	3098	13	1530	15	2195	22
MT8719	31	5582	25	782	29	6551	17	4305	24	3233	10	1664	29	947	31	1948	29
COLT	3	5045	31	975	22	6667	13	4229	25	1734	34	2011	26	956	30	1567	32
W-198	33	5835	22	1601	7	5738	25	4391	18	3301	9	1537	32	1472	17	2103	23
XNH1597	26	5252	28	1029	20	7235	5	4505	14	2371	27	872	34	1065	28	1436	34
NE87513	21	4968	32	664	32	6567	16	4066	29	1853	32	2315	24	1707	13	1958	28
W-236	34	6170	7	1946	4	5716	27	4610	11	3125	13	1706	28	1092	27	1974	26
SCOUT66	1	4927	33	1168	15	4829	34	3641	34	2286	29	2330	23	1307	21	1974	27
MEAN		5852		1228		6372		4484		2880		2765		1513		2386	
LSD(.05)		985		479		742		923		499		949		906		918	
C.V.		12.0		23.9		8.3		11.6		12.3		16.8		36.7		18.7	

Table 18. Continued.

C.I. OR SEL. NO.	ENTRY NO.	SHERIDAN WYOMING		ARCHER WYOMING		WYOMING STATE MEAN		PIERRE S. DAKOTA		WINNER S. DAKOTA		SOUTH DAKOTA STATE MEAN	
XNH1605	28	2338	1	1134	3	1736	1	2582	3	3600	17	3091	7
XNH1629	29	1849	4	1125	4	1487	3	3062	1	4712	2	3887	1
ND8844	13	1677	8	1116	5	1397	8	2390	5	5133	1	3762	2
ND8944	17	1796	7	894	16	1345	10	1778	18	3519	19	2649	16
NE89522	23	1800	6	1199	1	1500	2	2325	6	3883	11	3104	6
ND8955	18	2040	3	845	19	1443	4	1397	27	3867	12	2632	18
SD89102	12	1569	15	944	12	1256	14	2298	7	4414	3	3356	4
NE89657	25	2145	2	668	30	1407	6	2004	12	3154	27	2579	21
SD88137	5	1367	23	726	25	1047	28	1374	28	3618	15	2496	23
SD88171	6	1822	5	1047	9	1435	5	1439	24	3970	10	2705	15
ND8892	14	1385	22	1114	6	1250	15	1872	14	3598	18	2735	14
ND8933	16	1450	18	708	29	1079	24	1811	16	4210	4	3011	10
SD87143	8	1450	18	717	27	1084	23	1791	17	3972	9	2882	12
SD89204	11	1316	28	646	32	981	32	1883	13	2963	30	2423	25
SD88191	9	1551	16	863	17	1207	17	2035	11	4125	7	3080	8
NE89479	22	1298	30	780	22	1039	29	1455	22	3600	16	2527	22
ROUGHRIDER	2	1533	17	910	14	1222	16	2094	9	4134	6	3114	5
ND89142	19	1432	20	843	20	1138	21	2237	8	3629	14	2933	11
SD88185	7	1630	11	1024	10	1327	11	1027	31	3380	23	2204	28
SD88201	4	1666	9	1072	8	1369	9	1533	21	3723	13	2628	19
XNH1598	27	1630	11	995	11	1312	12	2060	10	3111	28	2586	20
W-193	32	1356	26	935	13	1145	20	1708	20	3201	26	2455	24
ND8930	15	1358	25	614	33	986	31	2966	2	4143	5	3554	3
SD89271	10	1296	31	847	18	1072	25	1863	15	3419	22	2641	17
NE88536	20	1282	32	897	15	1089	22	715	34	2782	33	1749	33
MT8713	30	1365	24	666	31	1015	30	1453	23	3212	25	2332	26
NE89526	24	1580	14	720	26	1150	19	1430	25	2966	29	2198	29
MT8719	31	1356	27	764	23	1060	26	2580	4	3493	20	3036	9
COLT	3	1430	21	1089	7	1260	13	1412	26	2914	32	2163	30
W-198	33	1661	10	1148	2	1404	7	1110	30	3459	21	2284	27
XNH1597	26	1184	33	567	34	875	34	1258	29	2950	31	2104	32
NE87513	21	1105	34	713	28	909	33	953	32	2295	34	1624	34
W-236	34	1598	13	733	24	1166	18	1710	19	3979	8	2845	13
SCOUT66	1	1311	29	796	21	1054	27	865	33	3369	24	2117	31
MEAN		1548		878		1213		1779		3603		2691	
LSD(.05)		573		N.S.		358		979		1139		735	
C.V.		22.7		36.7		27.8		33.7		19.4		24.2	

Table 18. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	WASECA MINNESOTA		ROSEMOUNT MINNESOTA		MINNESOTA STATE MEAN		ABERDEEN IDAHO		LIND WASHINGTON		REGIONAL AVERAGE	
XNH1605	28	4536	3	4208	16	4372	4	6715	4	1346	9	3770	1
XNH1629	29	3115	29	3992	23	3554	27	7582	1	1369	7	3723	2
ND8844	13	4820	1	3921	26	4370	5	5736	15	1460	4	3593	3
ND8944	17	3501	23	4573	5	4037	16	5461	21	1272	18	3522	4
NE89522	23	4326	6	4407	11	4367	6	7287	2	1001	30	3449	5
ND8955	18	4028	12	5140	1	4584	2	4734	28	1207	20	3431	6
SD89102	12	3989	13	4066	20	4028	17	6009	9	1049	29	3398	7
NE89657	25	4749	2	4425	9	4587	1	5760	13	864	33	3313	8
SD88137	5	3796	18	3490	32	3643	25	6395	6	1339	11	3242	9
SD88171	6	4105	10	3979	24	4042	15	5578	20	1395	6	3240	10
ND8892	14	4403	5	3912	27	4157	10	4563	31	1263	19	3217	11
ND8933	16	4191	9	4268	13	4230	9	4116	33	1129	26	3204	12
SD87143	8	3736	21	4835	2	4286	8	3988	34	1144	24	3184	13
SD89204	11	2486	33	4064	21	3275	32	7155	3	1329	12	3165	14
SD88191	9	3788	19	4486	8	4137	12	5642	19	489	34	3159	16
NE89479	22	2497	32	4539	6	3518	30	5736	15	1354	8	3159	15
ROUGHRIDER	2	4253	8	3519	31	3886	20	4751	27	1139	25	3141	17
ND89142	19	4099	11	4138	17	4118	13	4946	25	1075	28	3124	18
SD88185	7	4453	4	3842	29	4148	11	5673	17	1519	1	3100	19
SD88201	4	2758	31	4347	12	3552	28	4563	31	1320	13	3099	20
XNH1598	27	3534	22	4613	4	4074	14	5367	22	1341	10	3091	21
W-193	32	3400	24	4409	10	3905	19	6207	7	1506	3	3078	22
ND8930	15	3873	16	3208	34	3540	29	4879	26	1161	22	3042	23
SD89271	10	2976	30	4248	14	3612	26	6005	10	1123	27	3022	24
NE88536	20	3183	27	4237	15	3710	23	5750	14	1290	15	3006	25
MT8713	30	3840	17	3923	25	3882	22	5908	12	1201	21	2983	26
NE89526	24	4261	7	4519	7	4390	3	5071	23	897	32	2975	27
MT8719	31	3753	20	4017	22	3885	21	5054	24	1146	23	2947	28
COLT	3	3929	15	4113	19	4021	18	6527	5	1275	17	2945	29
W-198	33	3288	25	3636	30	3462	31	6053	8	1514	2	2927	30
XNH1597	26	3964	14	4654	3	4309	7	5948	11	1431	5	2907	31
NE87513	21	3226	26	4129	18	3678	24	5662	18	921	31	2836	32
W-236	34	1261	34	3851	28	2556	34	4657	30	1279	16	2793	33
SCOUT66	1	3133	28	3293	33	3213	33	4701	29	1307	14	2741	34
MEAN		3684		4147		3915		5594		1219		3163	
LSD(.05)		N.S.		658		N.S.		1883		272		367	
C.V.		33.6		9.7		23.5		16.5		13.7		17.8	

Table 19. Summary of mean yields (kg/ha) and ranks of 34 wheats grown in the 1992 Northern Regional Performance Nursery at 7 locations from which a CV of 15 or less and a significant F test for entries were obtained.

C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		HEMING-FORD NEBRASKA		ROSEMOUNT MINNESOTA		SIDNEY MONTANA		BOZEMAN MONTANA		WILLISTON N. DAKOTA		LIND WASHINGTON		REGIONAL AVERAGE	
XNH1605	28	3794	15	4809	2	4208	16	7217	1	8520	1	3627	3	1346	9	4789	1
XNH1629	29	3478	21	4978	1	3992	23	6839	3	8084	2	3967	1	1369	7	4673	2
ND8944	17	4510	1	4182	6	4573	5	6710	4	7247	4	3611	4	1272	18	4586	3
ND8955	18	4041	8	3978	11	5140	1	6907	2	6214	19	3314	8	1207	20	4400	4
ND8844	13	4052	7	4765	3	3921	26	6355	6	6163	20	3651	2	1460	4	4338	5
SD87143	8	4339	4	3909	13	4835	2	5221	29	6358	18	2868	20	1144	24	4096	6
SD89204	11	4004	9	4151	7	4064	21	6145	8	6627	14	2344	28	1329	12	4095	7
NE89522	23	3833	12	4217	5	4407	11	5712	23	6867	10	2627	24	1001	30	4095	8
XNH1598	27	3088	28	3676	21	4613	4	5973	13	7171	6	2730	23	1341	10	4085	9
SD88201	4	3892	11	3740	18	4347	12	6126	9	6010	22	3044	15	1320	13	4068	10
NE89479	22	3657	18	3873	14	4539	6	5108	30	6952	9	2858	21	1354	8	4049	11
ND8892	14	3832	13	4567	4	3912	27	5896	19	5688	28	3087	14	1263	19	4035	12
SD89102	12	3796	14	3995	8	4066	20	6459	5	5896	23	2947	18	1049	29	4030	13
SD88191	9	3356	27	3242	30	4486	8	5929	15	7615	3	2942	19	489	34	4008	14
NE89657	25	4322	5	3644	23	4425	9	5614	24	6696	12	2259	30	864	33	3975	15
W-193	32	2276	31	3427	29	4409	10	5938	14	7015	7	3176	12	1506	3	3964	16
XNH1597	26	3030	29	3734	19	4654	3	5252	28	7235	5	2371	27	1431	5	3958	17
NE88536	20	3662	17	3741	17	4237	15	5346	27	6811	11	2529	25	1290	15	3945	18
SD88137	5	4369	3	3435	28	3490	32	6063	10	6047	21	2801	22	1339	11	3935	19
SD88185	7	3417	23	3989	9	3842	29	5914	16	6981	8	1847	33	1519	1	3930	20
SD89271	10	4274	6	3583	24	4248	14	5901	18	5730	26	2479	26	1123	27	3905	21
ND8933	16	3685	16	3723	20	4268	13	6040	11	4847	33	3367	6	1129	26	3866	22
ND89142	19	3412	24	3750	16	4138	17	5914	16	5586	30	3025	16	1075	28	3843	23
SD88171	6	3359	26	3983	10	3979	24	5385	26	5596	29	3005	17	1395	6	3814	24
MT8713	30	2213	34	3492	26	3923	25	6009	12	6621	15	3211	11	1201	21	3810	25
MT8719	31	2376	30	3475	27	4017	22	5582	25	6551	17	3233	10	1146	23	3769	26
ROUGHRIDER	2	3497	20	3767	15	3519	31	5888	20	5193	31	3351	7	1139	25	3765	27
COLT	3	3980	10	3207	32	4113	19	5045	31	6667	13	1734	34	1275	17	3717	28
W-198	33	2274	32	3670	22	3636	30	5835	22	5738	25	3301	9	1514	2	3710	29
W-236	34	2222	33	3531	25	3851	28	6170	7	5716	27	3125	13	1279	16	3699	30
NE89526	24	4480	2	3214	31	4519	7	4744	34	5891	24	1957	31	897	32	3672	31
ND8930	15	3425	22	3152	33	3208	34	5845	21	4929	32	3382	5	1161	22	3586	32
NE87513	21	3565	19	3039	34	4129	18	4968	32	6567	16	1853	32	921	31	3577	33
SCOUT66	1	3372	25	3956	12	3293	33	4927	33	4829	34	2286	29	1307	14	3424	34
MEAN		3555		3812		4147		5852		6372		2880		1219		3977	
LSD(.05)		719		582		658		985		742		499		272		563	
C.V.		12.4		9.3		9.7		12.0		8.3		12.3		13.7		11.4	

Table 20. Summary of mean yields (kg/ha) and ranks of 34 wheats grown in the Northern Regional Performance Nursery for 5 intra-regional production zones (after Peterson, 1992).

C.I. OR SEL. NO.	ENTRY NO.	NORTH-CENTRAL PLAINS		NORTHERN HIGH PLAINS		NORTHERN PLAINS		NORTH-WEST PLAINS		NORTH-WEST		REGIONAL AVERAGE	
No. of locations		5		4		2		3		3		17	
XNH1605	28	3947	6	3749	2	1851	22	4476	2	4075	1	3770	1
XNH1629	29	3712	15	3884	1	1695	27	4623	1	3977	2	3723	2
ND8844	13	4365	1	3324	4	2229	15	4132	3	3035	11	3593	3
ND8944	17	4035	5	3083	9	2886	4	4033	5	3168	8	3522	4
NE89522	23	3828	10	3626	3	2202	16	3555	19	3309	4	3449	5
ND8955	18	4239	2	2899	20	2977	3	3872	7	2656	27	3431	6
SD89102	12	4117	3	3129	7	2439	11	3901	6	2693	26	3398	7
NE89657	25	4056	4	3054	12	2838	6	3292	25	2754	24	3313	8
SD88137	5	3749	14	2981	14	2793	7	3413	23	2871	20	3242	9
SD88171	6	3808	13	3108	8	2736	8	3277	26	2769	22	3240	10
ND8892	14	3813	12	2907	19	2625	10	3618	14	2632	28	3217	11
ND8933	16	3919	7	2499	34	3325	1	3739	10	2336	33	3204	12
SD87143	8	3821	11	2516	32	3038	2	3294	24	3003	12	3184	13
SD89204	11	3443	27	3317	5	1793	25	3457	20	3122	9	3165	14
SD88191	9	3698	16	2825	23	2150	17	3635	13	2903	18	3159	16
NE89479	22	3592	21	2922	16	2717	9	3140	27	3069	10	3159	15
ROUGHRIDER	2	3854	9	2740	26	2342	13	3778	9	2381	32	3141	17
ND89142	19	3674	18	2743	25	2424	12	3726	11	2582	30	3124	18
SD88185	7	3605	20	3079	10	1921	20	2929	29	3245	6	3100	19
SD88201	4	3692	17	2760	24	2102	18	3568	17	2757	23	3099	20
XNH1598	27	3539	24	2917	18	983	33	3588	16	3484	3	3091	21
W-193	32	3240	31	2981	13	1731	26	3607	15	3307	5	3078	22
ND8930	15	3391	29	2501	33	2861	5	4064	4	2277	34	3042	23
SD89271	10	3527	25	2933	15	1528	28	3414	22	2901	19	3022	24
NE88536	20	3616	19	2917	17	1880	21	2864	30	3001	13	3006	25
MT8713	30	3223	32	2858	22	1851	23	3558	18	2932	17	2983	26
NE89526	24	3881	8	2646	29	2314	14	2710	32	2606	29	2975	27
MT8719	31	3393	28	2662	28	1305	32	3798	8	2827	21	2947	28
COLT	3	3547	23	3063	11	1483	30	2730	31	2973	15	2945	29
W-198	33	3025	33	3133	6	1505	29	3415	21	2951	16	2927	30
XNH1597	26	3493	26	2858	21	968	34	2960	28	3232	7	2907	31
NE87513	21	3548	22	2630	31	2011	19	2591	34	2717	25	2836	32
W-236	34	2844	34	2630	30	1399	31	3668	12	2980	14	2793	33
SCOUT66	1	3361	30	2691	27	1818	24	2693	33	2435	31	2741	34
MEAN		3665		2958		2139		3504		2940		3163	
LSD(.05)		714		602		1196		580		894		367	
C.V.		20.4		17.4		26.1		15.5		11.9		17.8	

Table 21. Summary of mean yields (kg/ha) and ranks for 8 wheats grown in the Northern Regional Performance Nursery at 12 sites in 1991 and 1992 with state means and ranks.

C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA	NORTH PLATTE NEBRASKA	NEBRASKA STATE MEAN	WASECA MINNESOTA	ROSEMOUNT MINNESOTA	MINNESOTA STATE MEAN	ARCHER WYOMING	PIERRE S. DAKOTA
ND8844	13	2711 5	2821 1	2766 2	3535 2	2793 7	3164 5	1485 3	2839 1
SD88137	5	2772 2	2491 4	2631 3	3395 3	3254 3	3325 2	1481 4	2651 2
ND8892	14	2549 6	2513 3	2531 5	3281 6	3094 6	3187 4	1556 1	2286 5
SD88171	6	2391 8	2464 5	2427 7	3338 4	3224 5	3281 3	1279 6	2248 7
SD88201	4	2747 4	2325 7	2536 4	2841 8	3457 2	3149 7	1546 2	2543 3
NE88536	20	2755 3	2807 2	2781 1	3078 7	3247 4	3163 6	1182 7	2000 8
COLT	3	2997 1	1892 8	2444 6	3282 5	3507 1	3395 1	1381 5	2317 4
ROUGHRIDER	2	2430 7	2409 6	2420 8	3559 1	2692 8	3126 8	846 8	2262 6
MEAN		2669	2465	2567	3289	3158	3224	1344	2393
LSD(.05)		N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
C.V.		12.3	13.3	12.8	24.6	12.3	19.7	25.0	23.5

Table 21. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	SIDNEY MONTANA	BOZEMAN MONTANA	MONTANA STATE MEAN	WILLISTON N. DAKOTA	CASSELTON N. DAKOTA	CARRINGTON N. DAKOTA	NORTH DAKOTA STATE MEAN	ABERDEEN IDAHO	REGIONAL AVERAGE
ND8844	13	4810 1	5862 1	5336 1	3000 1	3592 4	2170 5	2921 4	6143 5	3480 1
SD88137	5	3784 6	5082 6	4433 6	2418 6	4376 1	2608 1	3134 1	6773 3	3424 2
ND8892	14	4233 3	5147 5	4690 2	2689 3	3733 3	2519 2	2980 2	6040 6	3303 3
SD88171	6	3902 5	5042 7	4472 5	2687 4	3791 2	2418 4	2965 3	6597 4	3282 4
SD88201	4	4045 4	5225 3	4635 3	2572 5	3564 5	1859 6	2665 6	6000 7	3227 5
NE88536	20	3549 7	5551 2	4550 4	2272 7	3491 6	1449 8	2404 7	7116 2	3208 6
COLT	3	3213 8	5175 4	4194 8	1878 8	3180 8	1500 7	2186 8	7592 1	3159 7
ROUGHRIDER	2	4390 2	4445 8	4418 7	2854 2	3325 7	2516 3	2898 5	5600 8	3111 8
MEAN		3991	5181	4586	2546	3632	2130	2769	6483	3273
LSD(.05)		N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
C.V.		16.5	14.2	15.2	10.9	8.2	22.5	13.1	11.9	16.5

Table 22. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 45 entries in the 1992 Northern Regional Performance Nursery grown at 17 locations.

C.I. OR SEL. NO.	ENTRY NO.	17 SITE REGIONAL AVERAGE KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r^2)
XNH1605	28	3770	1.22	0.97	0.93
XNH1629	29	3723	1.19	0.94	0.88
ND8844	13	3593	1.00	0.96	0.93
ND8944	17	3522	1.10	0.97	0.95
NE89522	23	3449	1.09	0.96	0.92
ND8955	18	3431	1.03	0.95	0.90
SD89102	12	3398	1.03	0.98	0.95
NE89657	25	3313	1.05	0.95	0.90
SD88137	5	3242	1.04	0.96	0.92
SD88171	6	3240	0.88	0.98	0.96
ND8892	14	3217	0.90	0.96	0.93
ND8933	16	3204	0.81	0.90	0.82
SD87143	8	3184	0.87	0.92	0.84
SD89204	11	3165	1.13	0.96	0.92
SD88191	9	3159	1.13	0.97	0.95
NE89479	22	3159	1.02	0.96	0.93
ROUGHRIDER	2	3141	0.86	0.96	0.91
ND89142	19	3124	0.90	0.98	0.97
SD88185	7	3100	1.07	0.97	0.95
SD88201	4	3099	0.94	0.97	0.94
XNH1598	27	3091	1.03	0.95	0.91
W-193	32	3078	1.05	0.96	0.92
ND8930	15	3042	0.81	0.91	0.82
SD89271	10	3022	0.98	0.97	0.93
NE88536	20	3006	1.07	0.97	0.94
MT8713	30	2983	1.05	0.96	0.93
NE89526	24	2975	0.92	0.95	0.90
MT8719	31	2947	0.99	0.96	0.92
COLT	3	2945	1.06	0.96	0.92
W-198	33	2927	0.93	0.94	0.89
XNH1597	26	2907	1.12	0.96	0.92
NE87513	21	2836	1.03	0.95	0.90
W-236	34	2793	0.87	0.90	0.81
SCOUT66	1	2741	0.82	0.97	0.93

Table 23. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 8 entries in the 1991 and 1992 Northern Regional Performance Nursery grown at 12 locations.

C.I. OR SEL. NO.	ENTRY NO.	12 SITE REGIONAL AVERAGE KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r^2)
ND8844	13	3480	0.96	0.95	0.91
SD88137	5	3424	1.02	0.96	0.91
ND8892	14	3303	0.93	0.98	0.96
SD88171	6	3282	0.97	0.99	0.98
SD88201	4	3227	0.98	0.97	0.95
NE88536	20	3208	1.14	0.98	0.95
COLT	3	3159	1.14	0.96	0.92
ROUGHRIDER	2	3111	0.86	0.95	0.91

Table 24. Summary of agronomic and yield data for 34 wheats grown in the 1992 Northern Regional Performance Nursery.

C.I. OR SEL. NO.	ENTRY: NO.	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1:	WINTER SURVIVAL %	LODGING 0-9	STRAW STRENGTH: %	LEAF RUST: SEVERITY: %	MILDEW 0-5	TAN SPOT %	VOLUME WEIGHT KG/HL	YIELD KG/HA
Number of locations		13	15	6	5	1	2	1	1	17	17
XNH1605	28	78	153	75	3	3.5	39	4	18	76.9	3770
XNH1629	29	77	155	75	2.4	3.5	48	2	8	78.2	3723
ND8844	13	85	156	77	3.2	3.5	6	3	15	77.3	3593
ND8944	17	86	156	72	3.5	3	1	2	15	76.9	3522
NE89522	23	78	151	59	3.2	4	41	2	20	77	3449
ND8955	18	79	155	82	3.7	4	6	3	15	76	3431
SD89102	12	82	156	75	4	3.5	7	2	15	79.1	3398
NE89657	25	76	153	68	2.7	3	16	1	13	76.6	3313
SD88137	5	85	153	75	3.8	4	5	1	24	77.7	3242
SD88171	6	86	152	80	3.5	3.5	27	2	14	77.7	3240
ND8892	14	88	156	77	3.3	3	7	3	13	77.1	3217
ND8933	16	87	157	86	3.3	3.5	1	4	23	76.8	3204
SD87143	8	79	153	79	2.5	3.5	7	1	14	77.8	3184
SD89204	11	75	154	62	3.4	4	2	3	18	75.9	3165
SD88191	9	69	154	73	2.3	3.5	38	2	18	77.3	3159
NE89479	22	81	151	78	3.1	3	33	3	18	77	3159
ROUGHRIDER	2	86	156	90	3.1	3.5	13	2	18	78.1	3141
ND89142	19	90	156	79	2.6	3.5	6	2	18	78.1	3124
SD88185	7	78	152	55	3.4	3.5	25	2	10	78.5	3100
SD88201	4	80	155	71	3	4	9	2	18	79.2	3099
XNH1598	27	68	152	57	2.1	4	45	3	18	77.2	3091
W-193	32	89	157	77	2.8	3.5	16	2	18	77.2	3078
ND8930	15	88	157	85	2.3	3	3	4	19	77.7	3042
SD89271	10	74	151	73	3.6	4	8	4	16	79.8	3022
NE88536	20	81	153	68	3.1	2	15	3	23	75.3	3006
MT8713	30	67	155	82	1.3	2	50	4	20	77.6	2983
NE89526	24	75	152	64	2.2	3	26	2	12	77.3	2975
MT8719	31	73	156	78	2.1	3	53	4	20	77.4	2947
COLT	3	66	152	56	2	3.5	36	2	18	77	2945
W-198	33	90	158	78	3.8	4	22	3	18	77.1	2927
XNH1597	26	70	152	57	2.3	4	40	2	18	76.6	2907
NE87513	21	73	151	60	2.8	3.5	35	2	20	76.8	2836
W-236	34	86	155	76	3.5	4	11	4	15	76.5	2793
SCOUT66	1	83	151	76	4.9	3.5	38	2	19	77.7	2741

Table 25.
Seedling reaction to entries of the 1992 Northern Regional Hard Red Winter Wheat Performance Nursery to selected isolates of Puccinia graninis f. sp. tritici. (by D.V. McVey, USDA-ARS, Cereal Rust Laboratory, U. of Minnesota, St. Paul, MN., 55108)

		Reaction Produced by Isolate							
No	Cult/Line	68-41-73A HNLQ	72-00-1370C QFBS	69-21-399 QSHS	72-25-635C RKQS	72-00-53A RTQQ	72-4-1A TNMH	74-21-1409A TNMK	Post. Gene
1	Kharkof	S	S	S	S	S	S	S	None
2	Roughrider	;	0	0	S	S	S	S	5,36
3	Colt	0;	0	2	2=	0;	0;	0;	6,7B,10,17
4	SD88201	0	0;	S	X	23	0;	0;	6,10
5	SD88137	0;	0	2	23	S	0;	0;	6,+
6	SD88171	0;	2-	2-	2	2=	2=	23	5,24/31
7	SD88185*	0	0;	2-	S	S	0;	-	6,+
8	SD87143*	0;	2=	2=	2	2=	-	2	5,24/31
9	SD88191*	0	0;	2-	2=	0;	0;	0;	6,17,24/31
10	SD89271*	0	2-	S	2=	0;	-	S	17,+
11	SD89204*	0	;	S	0;	0;	S	S	5,10,17
12	SD89102*	0	2=	S	S	0;	2-	S	5,+
13	ND8844	0	2-	2-	2=	0;	0;	2=	5,17,24/31
14	ND8892	0	2=	2=	2=	2-	2=	2=	5,24/31
15	ND8930*	0	0;	S	S	0;	0;	0;	5,6,17
16	ND8933*	0	0;	S	S	;,S	0;	0;	5,6,Seg17
17	ND8944*	0	2=	2=	2=	0;	0;	-	5,17,24/31
18	ND8955*	0	0;	S	S	;	0;	0;	5,6,17
19	ND89142*	0	0;	S	1	0;	0;	0;	5,6,10,17
20	NE88536	0	0;	S	S	0;	0;	0;	5,6,17
21	NE87513*	0	0;	2=,S	;1,S	0;	0;	0;	5,6,17,Seg10
22	NE89479*	0	2=	2=	2=	2=	2=	2=	5,24/31
23	NE89522*	0	0;	S,2=	S,2	2=,S	0;	0;	5,6,Seg24/31
24	NE89526*	0	0;	2	2=	0;	0;	2=	5,17,24/31
25	NE89657*	0	0;	2=	2=	0;	0;	0;	5,6,17,24/31
26	XNH1697*	0	0;	2=	2=	;1=	0;	0;	5,6,17,24/31
27	XNH1598*	0	0;	S	S	0;	0;	0;	5,6,17
28	XNH1605*	S	23	S	S	S	S	S	+
29	XNH1629*	S	23	S	S	S	S	S	+
30	MY8713*	2	2=	0;	2=	2-	2=	S	+
31	MT8719*	23	23	;	23	23	2	S	+
32	W-193*	0	S	S	S	S	S	S	5
33	W-198*	0	S	S,2=	S	S	S	S	5
34	W-236*	0	S	S	S	S	S	S	5
*	NEW ENTRY								

Table 26.
Adult plant field reaction of entries of the 1992 Uniform Northern Hard Red Winter Wheat Performance Nursery to leaf and stem rust at St. Paul MN. (by D.v. McVey, Cereal Rust Lab. U. of MN., St. Paul, MN.,55108)

Entry No.	Cultivar/ Designator	Leaf rust 7/1/92	Stem rust 7/1/92	Stem rust 7/16/92
1	KHARKOF	40S	TR	60S
2	ROUGHRIDER	30S	TR	TMR
1	COLT	20MS-S	TR-MR	20MR-MS
3	SD88201	TMS-S	TR-MR	60S
5	SD88137	TMS-S	TR-MR	60S
5	SD88171	TMS-S	5MS-S	60S
7	SD88185	TMS	30S	60S
8	SD87143	5MS-S	TR-MR	60S
9	SD88191	TMS-S	TR	60S
10	SD89271	TMS-S	20MS-S	60S
11	SD89204	5MS-S	50S	60S
12	SD89102	TMS-S	TMS-S	60S
13	ND8844	5MS-S	TR	60S
14	ND8892	10S	5R-MR	60S
15	ND8930	10S	5MS-S	60S
16	ND8933	TMS-S	20S	60S
17	ND8944	TR	TR	20MS-S
18	ND8955	TMR-MS	30S	60S
19	ND89142	TMS	0	30MS-S
20	NE88536	5S	30MS-S	60S
21	NE87513	5S	TR	10MS-S
22	NE89479	10S	5R-MR	30MS-S
23	NE89522	20S	5R-MR	60S
24	NE89536	TMS	TR	20MS-S
25	NE89657	5MR-MS	TR	10MS-S
26	XNH1597	TMS	TR	TR-MR
27	XNH1598	30S	10MS-S	60S
28	XNH1605	5MS-S	60S	80S
29	XNH1629	-	80S	-
30	MT8713	80S	TR	TR
31	MT8719	80S	TR	TR
32	W-193	TS	60S	60S
33	W-198	20S	60S	60S
34	W-236	20S	60S	60S

Table 27. Hessian fly reaction, Great Plains biotype, for entries in the 1992 Northern Regional Performance Nursery. Data provided by J. H. Hatchett, USDA-ARS, Manhattan, KS.

C.I. OR SEL. NO.	ENTRY NO.	HESSIAN FLY REACTION TYPE	HESSIAN FLY NO. OF PLANTS RES.	HESSIAN FLY NO. OF PLANTS SUSC.
SCOUT66	1	S	0	23
ROUGHRIDER	2	H	6	22
COLT	3	H	12	6
SD88201	4	H	10	15
SD88137	5	S	0	24
SD88171	6	H	19	14
SD88185	7	R	18	0
SD87143	8	S	0	23
SD88191	9	R	20	5
SD89271	10	S	0	25
SD89204	11	S	0	18
SD89102	12	S	0	23
ND8844	13	S	0	19
ND8892	14	S	0	21
ND8930	15	S	0	24
ND8933	16	S	2	18
ND8944	17	S	0	16
ND8955	18	S	0	26
ND89142	19	S	0	29
NE88536	20	S	0	26
NE87513	21	S	2	24
NE89479	22	S	0	19
NE89522	23	S	0	19
NE89526	24	H	8	16
NE89657	25	H	12	11
XNH1597	26	S	1	12
XNH1598	27	S	3	16
XNH1605	28	S	0	26
XNH1629	29	S	0	18
MT8713	30	H	6	13
MT8719	31	H	7	10
W-193	32	S	0	23
W-198	33	S	0	23
W-236	34	S	0	24
NEWTON			0	89

Table 28. Aluminum tolerance of lines tested in the 1992 NRPN based on hematoxylin staining of seedling roots. (Data provided by B.F. Carver, Stillwater, OK)

Entry No.	Selection No.	Stain Intensity[a] Al Concentration (mM) 0.18	0.36	0.72	Rating[b]
1	Kharkof	C	C	C	VS
2	Roughrider	C	C	C	VS
3	Colt	P+	C	C	MS
4	SD88201	N	N	P	T
5	SD88137	C	C	C	VS
6	SD88171	C	C	C	VS
7	SD88185	N	P-	P+	T
8	SD87143	C	C	C	VS
9	SD88191	N	P-	P	T
10	SD89271	C	C	C	VS
11	SD89204	N	P-	P	T
12	SD89102	C	C	C	VS
13	ND8844	C	C	C	VS
14	ND8992	N/C	C/P-	C/P	VS-T*
15	ND8930	P-	P-	P	T
16	ND8933	N	P-	P	T
17	ND8944	N	P-	P+	T
18	ND8955	C/P-	P-/C	C/P+	VS-T*
19	ND89142	N/C	P-/C	P/C	VS-T*
20	NE88536	P-/C	P/C	P+/C	VS-T*
21	NE87513	C/P	C	C	VS-MS*
22	NE89479	C	C	C	VS
23	NE89522	C	C	C	VS
24	NE89526	C	C	C	VS
25	NE89657	P/P+	C	C	MS
26	XNH1597	P-/N	P-	P+	T
27	XNH1598	P	C	C	MS
28	XNH1605	C	C	C	VS
29	XNH1629	C	C	C	VS
30	MT8713	C	C	C	VS
31	MT8719	C	C	C	VS
32	W-193	P-	P	C	I
33	W-198	P-/C	P/C	C/P+	VS-T*
34	W-236	C/N	P/C	P+/C	VS-T*

[a]C, P, and N = complete, partial, and no staining of root tips, respectively; P- and P+ indicate light and dark intensity, respectively, of partial staining.

[b]VS = very susceptible, MS = moderately susceptible, I = intermediate and T = tolerant ($\leq$ 0.72 mM Al); * = heterogeneous response; predominant stain intensity listed first for each Al concentration.

1992

Western Plains Regional Performance Nursery

Entry No.	Variety or Pedigree	Sel. No.	Source
1**	Larned	CI17650	Check
2**	Siouxland	PI483469	"
3**	Lamar	CO820009	"
4**	Arapahoe	PI518591	"
5	TAM-105/Sandy	CO860154	Colorado
6	Carson/Sandy	CO870258	"
7	Oslo/Sandy//Hawk	CO870310	"
8	Colt/TX80GH3006	CO880240	"
9*	Lov13/2* Ctk 78//TAM-105	CO880054	
10*	Colt/TX3006	CO880256	
11	T. Diccocoides/Brule//Arkan	NE88536	Nebraska
12*	NE69613/Sage//Migro Archer	NE89504	"
13*	TAM-107 x Larned x Brule seln.	NE89439	"
14*	Wrr 5*/Agent//Aurora/3/Ctk 78/4/Brule	NE88453	"
15	KS81H1640GB/TX78V2154	TX89V4613	Texas
16	Brule/Vee's'	TX89V5029	"
17	CO693591/Ctk	2IWWSN-7159	"
18	Agate/TAM-105	TX88V4425	"
19	(TAM-105*4/Ami)*4//Largo	TXGH10209	"
20	(TAM-105*4/Ami)*4//Largo	TXGH10289	"
21	Syl/Vona	TX86A7210	"
22	TX86V1540/TX78V2430-4	TX90V6132	"
23	Siouxland//Nadadores 63/Sturdy	TX86D1340	"
24*	Siouxland/TAM-101	TX90A9507	"
25*	TAM-105*4/Amigo*5//Largo	TX88A6840	"
26	Quantum Hybrid Wheat	QT542	Hybritech
27	" "	XNH1401	"
28	" "	XH1332	"
29	" "	XH1419	"
30*	" "	XH1438	"
31	NS2630/Thunderbird	WI88-024	Agripro
32*	TK/Burt/5/SM6/4/2*IT/UT175A-53//BDLSBurt/3/ CI13438/6/TK/Burt/Bez1	IDO352	Idaho
33*	PI V/3/NapHal/Lancer/2/TX1682/NE70654	N88L267	NE, USDA
34*	NE75424/3/NapHal/At66//NS 10-18	N86L107	"

** New seed provided
* New Entries

TEST SITE INFORMATION - WPRPN

1991 was the second year for production and evaluation of entries in the Western Plains Regional Performance Nursery. This nursery is intended exclusively for evaluation of tall wheats (non-semidwarf) in the dryland production areas of the western Great Plains. Six locations were planted for evaluation of the nursery entries.

Bushland, TX -- No additional information provided.

Goodwell, OK -- Nursery was lost.

Colby, KS -- Nursery was significantly damaged by May frost. See information for SRPN.

Hemingford, NE -- See information for SRPN.

Akron, CO -- There was significant differential hail damage one week prior to harvest. Yield data was not considered useful as it was related primarily to shattering resistance and relative maturity.

Archer, WY -- No additional information provided.

Table 29. Yield and agronomic data for 34 wheats grown in the Western Plains Regional Performance Nursery in 1992.

BUSHLAND (DRYL.)

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
XH1419	29	3894	75.1	78
XH1332	28	3835	74.8	78
XH1438	30	3818	76.2	77
TX88A6840	25	3578	75.5	72
XNH1401	27	3566	76.6	83
C0880054	9	3522	75.3	63
N86L107	34	3508	74.7	71
QT542	26	3493	76.8	73
C0880256	10	3434	77.7	70
LARNED	1	3360	75.9	76
WI88-024	31	3331	77.4	77
TX90A9507	24	3322	73	66
TX86A7210	21	3280	74.2	67
ARAPAHOE	4	3275	74	62
NE89439	13	3271	75.6	69
TX86D1340	23	3262	75.9	80
TXGH10289	20	3145	73	72
TX90V6132	22	3111	73.7	76
C0880240	8	3076	76.5	71
2IWWSN-7159	17	3046	74.6	69
C0870258	6	3031	73.9	73
TX88V4425	18	3024	76.4	71
C0870310	7	3008	76	69
SIOUXLAND	2	2963	74.4	73
TX89V5029	16	2921	73.3	67
N88L267	33	2898	74.6	66
NE89504	12	2883	75.9	72
LAMAR	3	2833	76.8	71
C0860154	5	2609	75.5	64
NE88536	11	2540	72.1	68
TX89V4613	15	2502	75.9	71
NE88453	14	2468	76.2	74
TXGH10209	19	2430	75.7	64
ID0352	32	2172	72.9	66
MEAN		3130		
LSD(.05)		643		
C.V.		12.6		

COLBY

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD* KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING %
XH1332	28	2139*	55.4	89	130	27
TXGH10289	20	2013	56.7	83	128	33
XH1438	30	1937	57.7	88	130	23
NE89439	13	1910	67.3	83	132	15
TX88V4425	18	1854	68.1	94	132	43
CO880054	9	1838	55.6	73	131	17
NE89504	12	1818	59.9	86	132	8
XH1419	29	1814	58.6	84	130	28
TXGH10209	19	1784	54	80	128	53
TX90V6132	22	1778	63.6	95	133	10
WI88-024	31	1766	56.5	80	132	13
LARNED	1	1751	67.4	87	132	70
ID0352	32	1749	69.4	91	138	13
NE88453	14	1688	64.4	94	134	27
SIOUXLAND	2	1677	60	86	133	13
TX86A7210	21	1670	62.9	87	131	13
TX88A6840	25	1636	52.6	75	129	40
ARAPAHOE	4	1632	57.6	83	132	12
QT542	26	1630	60.8	91	132	27
2IWWSN-7159	17	1610	56.9	83	132	33
TX86D1340	23	1502	64.1	91	134	13
CO860154	5	1497	59.7	91	134	20
CO880256	10	1455	59.7	77	133	12
XNH1401	27	1455	65.2	92	133	17
TX89V4613	15	1419	54.3	79	131	27
TX89V5029	16	1397	42.4	76	129	50
N88L267	33	1325	61.9	83	134	17
CO870258	6	1291	61.3	88	134	10
NE88536	11	1291	57.5	85	133	10
CO880240	8	1260	57.4	86	134	6
N86L107	34	1186	46.7	81	130	15
CO870310	7	1134	48.7	78	131	12
LAMAR	3	971	53.2	86	133	40
TX90A9507	24	841	48.5	78	133	8
MEAN		1580				
LSD(.05)		329				
C.V.		12.7				

* Substantial freeze damage affected yields.

HEMINGFORD

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
ID0352	32	4708	74.8	61
QT542	26	4474	80.4	74
XNH1401	27	4217	81.5	69
C0880240	8	4161	80.5	62
LAMAR	3	4145	82.8	67
TX90V6132	22	4046	79.3	72
NE89439	13	3995	78.6	65
C0880054	9	3892	78.9	57
XH1332	28	3883	78.4	67
C0870258	6	3858	79.7	64
NE89504	12	3739	78.8	69
TX88V4425	18	3723	80	76
NE88453	14	3645	80.6	75
2IWWSN-7159	17	3614	79.2	71
C0860154	5	3591	80.9	67
XH1438	30	3524	78.6	58
N86L107	34	3524	77	67
TX86A7210	21	3497	78.9	62
SIOUXLAND	2	3441	81.3	72
NE88536	11	3363	77	69
LARNED	1	3351	81	69
C0870310	7	3309	80.1	61
N88L267	33	3230	78.3	67
C0880256	10	3134	80	60
WI88-024	31	3123	80.6	60
TXGH10209	19	3051	78.7	57
TXGH10289	20	3026	78	61
XH1419	29	2986	76.1	65
TX90A9507	24	2939	77.4	58
TX86D1340	23	2919	80	70
ARAPAHOE	4	2905	77.4	58
TX88A6840	25	2849	76.1	55
TX89V4613	15	2690	79.3	56
TX89V5029	16	2569	78	55
MEAN		3503		
LSD(.05)		620		
C.V.		10.8		

AKRON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
ID0352	32	3021	75.1	97
TAM-107	35	2880	80.3	81
TXGH10209	19	2471	80.5	76
XNH1401	27	2425	80.5	97
TX88A6840	25	2335	78.8	81
TX86D1340	23	2274	80.3	97
TX90A9507	24	2265	77.5	81
TXGH10289	20	2237	78.8	76
XH1332	28	2086	79.1	97
QT542	26	1915	81.1	91
TX88V4425	18	1858	80.4	86
LARNED	1	1786	80.9	91
C0870258	6	1784	79.7	91
C0880240	8	1776	80.1	89
TX89V4613	15	1762	79.5	76
XH1419	29	1708	79.5	97
C0870310	7	1691	80	84
C0880054	9	1658	81.2	81
C0860154	5	1646	82.1	91
TX90V6132	22	1627	78.9	91
C0880256	10	1594	81.1	86
WI88-024	31	1518	80.9	86
YUMA	36	1507	81.9	81
NE88536	11	1437	77.5	91
TX89V5029	16	1362	80.2	76
XH1438	30	1302	81	97
NE89439	13	1284	77.8	81
SIOUXLAND	2	1267	80.7	91
2IWWSN-7159	17	1185	80.8	81
NE88453	14	1163	79.7	91
N86L107	34	1077	76.6	81
ARAPAHOE	4	1041	77.6	86
N88L267	33	1015	78.3	86
TX86A7210	21	912	68.2	86
NE89504	12	747	73	86
MEAN		1691		
LSD(.05)		428		
C.V.		15.5		

ARCHER

WYOMING

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	STAND %
XH1332	28	1459	77.1	150	89
QT542	26	1428	76.5	155	87
XNH1401	27	1365	78.4	155	91
LAMAR	3	1271	78	155	88
C0870258	6	1262	76.9	156	87
ID0352	32	1246	75.3	160	80
C0880240	8	1231	75.7	154	87
TX90A9507	24	1188	74.6	152	91
NE89439	13	1130	76	155	86
TX90V6132	22	1072	70.7	157	84
ARAPAHOE	4	1058	73.7	153	88
TXGH10289	20	1058	72.4	151	85
WI88-024	31	1047	75.6	157	83
C0870310	7	1042	75.6	154	70
SIOUXLAND	2	1033	75.2	153	88
C0880054	9	1018	77.5	155	80
N88L267	33	1015	72.9	157	91
TX88V4425	18	1011	74.7	155	87
NE88536	11	1007	73.8	154	89
TX86D1340	23	1007	76.5	155	80
XH1438	30	1007	76.4	152	92
2IWWSN-7159	17	933	74.2	155	85
TX88A6840	25	928	70.7	150	83
TX86A7210	21	917	74.2	154	89
NE88453	14	899	75.9	157	78
C0860154	5	892	77.3	154	86
XH1419	29	827	76	151	84
NE89504	12	789	74.3	152	91
C0880256	10	735	76.8	152	86
TX89V4613	15	646	64.8	152	75
N86L107	34	646	70.3	150	87
LARNED	1	625	74.4	151	90
TXGH10209	19	554	70.2	155	77
TX89V5029	16	439	69.9	151	68
MEAN		994			
LSD(.05)		452			
C.V.		27.8			

Table 30. Summary of mean yields (kg/ha) and ranks of 34 wheats grown in the 1992 Western Plains Regional Performance Nursery at 5 locations.

C.I. OR SEL. NO.	ENTRY NO.	BUSHLAND (DRYL.) TEXAS		COLBY* KANSAS		AKRON* COLORADO		ARCHER WYOMING		HEMING-FORD NEBRASKA		REGIONAL AVERAGE	
QT542	26	3493	8	1630	19	1915	9	1428	2	4474	2	3132	1
XH1332	28	3835	2	2139	1	2086	8	1459	1	3883	9	3059	2
XNH1401	27	3566	5	1455	24	2425	3	1365	3	4217	3	3049	3
C0880240	8	3076	19	1260	30	1776	13	1231	7	4161	4	2822	4
C0880054	9	3522	6	1838	6	1658	17	1018	16	3892	8	2810	5
NE89439	13	3271	15	1910	4	1284	25	1130	9	3995	7	2798	6
XH1438	30	3818	3	1937	3	1302	24	1007	20	3524	16	2783	7
LAMAR	3	2833	28	971	33	.	.	1271	4	4145	5	2750	8
TX90V6132	22	3111	18	1778	10	1627	19	1072	10	4046	6	2743	9
C0870258	6	3031	21	1291	28	1784	12	1262	5	3858	10	2717	10
ID0352	32	2172	34	1749	13	3021	1	1246	6	4708	1	2709	11
TX88V4425	18	3024	22	1854	5	1858	10	1011	18	3723	12	2586	12
XH1419	29	3894	1	1814	8	1708	15	827	27	2986	28	2569	13
TX86A7210	21	3280	13	1670	16	912	32	917	24	3497	18	2564	14
N86L107	34	3508	7	1186	31	1077	29	646	30	3524	16	2559	15
2IWWSN-7159	17	3046	20	1610	20	1185	27	933	22	3614	14	2531	16
WI88-024	31	3331	11	1766	11	1518	21	1047	13	3123	25	2500	17
TX90A9507	24	3322	12	841	34	2265	6	1188	8	2939	29	2483	18
SIOUXLAND	2	2963	24	1677	15	1267	26	1033	15	3441	19	2479	19
NE89504	12	2883	27	1818	7	747	33	789	28	3739	11	2470	20
C0870310	7	3008	23	1134	32	1691	16	1042	14	3309	22	2453	21
TX88A6840	25	3578	4	1636	17	2335	4	928	23	2849	32	2452	22
LARNED	1	3360	10	1751	12	1786	11	625	32	3351	21	2446	23
C0880256	10	3434	9	1455	23	1594	20	735	29	3134	24	2434	24
ARAPAHOE	4	3275	14	1632	18	1041	30	1058	11	2905	31	2413	25
TXGH10289	20	3145	17	2013	2	2237	7	1058	11	3026	27	2410	26
TX86D1340	23	3262	16	1502	21	2274	5	1007	19	2919	30	2396	27
N88L267	33	2898	26	1325	27	1015	31	1015	17	3230	23	2381	28
C0860154	5	2609	29	1497	22	1646	18	892	26	3591	15	2364	29
NE88453	14	2468	32	1688	14	1163	28	899	25	3645	13	2337	30
NE88536	11	2540	30	1291	28	1437	22	1007	20	3363	20	2303	31
TXGH10209	19	2430	33	1784	9	2471	2	554	33	3051	26	2012	32
TX89V5029	16	2921	25	1397	26	1362	23	439	34	2569	34	1976	33
TX89V4613	15	2502	31	1419	25	1762	14	646	30	2690	33	1946	34
MEAN		3130		1580		1662		994		3503		2542	
LSD(.05)		643		329		426		452		620		611	
C.V.		12.6		12.7		15.7		27.8		10.8		13.9	

* Not used in regional means.

Table 31. Summary of agronomic and yield data for 34 wheats grown in the 1992 Western Plains Regional Performance Nursery.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING %	VOLUME WEIGHT KG/HL	YIELD KG/HA
Number of locations			4	2	1	5	3
Quantum Hybrid Wheat	QT542	26	82	144	27	75.1	3132
Quantum Hybrid Wheat	XH1332	28	83	140	27	73	3059
Quantum Hybrid Wheat	XNH1401	27	85	144	17	76.5	3049
Colt/TX80GH3006	CO880240	8	77	144	6	74	2822
Lov13/2* Ctk 78//TAM-105	CO880054	9	69	143	17	73.7	2810
TAM-107 x Larned x Brule seln.	NE89439	13	75	144	15	75.1	2798
Quantum Hybrid Wheat	XH1438	30	80	141	23	74	2783
Lamar	LAMAR	3	75	144	40	72.7	2750
TX86V1540/TX78V2430-4	TX90V6132	22	84	145	10	73.3	2743
Carson/Sandy	CO870258	6	79	145	10	74.3	2717
Complex Pedigree	IDO352	32	79	149	13	73.5	2709
Agate/TAM-105	TX88V4425	18	82	144	43	75.9	2586
Quantum Hybrid Wheat	XH1419	29	81	141	28	73.1	2569
Syl/Vona	TX86A7210	21	76	143	13	71.7	2564
NE75424/3/NapHal/At66//NS 10-18	N86L107	34	75	140	15	69.1	2559
CO693591/Ctk	2IWWSN-7159	17	76	144	33	73.1	2531
NS2630/Thunderbird	WI88-024	31	76	145	13	74.2	2500
Siouxland/TAM-101	TX90A9507	24	71	142	8	70.2	2483
Siouxland	SIOUXLAND	2	81	143	13	74.3	2479
NE69613/Sage//Migro Archer	NE89504	12	78	142	8	72.4	2470
Oslo/Sandy//Hawk	CO870310	7	73	142	12	72.1	2453
TAM-105*4/Amigo*5//Largo	TX88A6840	25	71	140	40	70.7	2452
Larned	LARNED	1	81	142	70	75.9	2446
Colt/TX3006	CO880256	10	73	142	12	75	2434
Arapahoe	ARAPAHOE	4	72	143	12	72.1	2413
(TAM-105*4/Ami)*4//Largo	TXGH10289	20	73	139	33	71.8	2410
Siouxland//Nadadores 63/Sturdy	TX86D1340	23	84	145	13	75.3	2396
Pl V/3/NapHal/Lcr/2/TX1682/NE70654	N88L267	33	76	146	17	73.2	2381
TAM-105/Sandy	CO860154	5	78	144	20	75.1	2364
Wrr 5*/Agent//Aur/3/Ctk78/4/Brule	NE88453	14	84	145	27	75.3	2337
T. Diccocoides/Brule//Arkan	NE88536	11	78	144	10	71.6	2303
(TAM-105*4/Ami)*4//Largo	TXGH10209	19	69	141	53	71.8	2012
Brule/Vee's'	TX89V5029	16	68	140	50	68.8	1976
KS81H1640GB/TX78V2154	TX89V4613	15	70	142	27	70.8	1946

Table 32.
Seedling reaction to entries of th 1992 Western Plains Regional Performance Nursery to selected isolates of Puccinia graminis f. sp. tritici. (by D.V. McVey, USDA-ARS, Cereal Rust Laboratory, U. of Minnesota, St. Paul, MN., 55108)

		Reaction Produced by Isolate							
No	Cult/Line	68-41-73A HNLQ	72-00-1370C QFBS	69-21-399 QSHS	72-25-635C RKQS	72-00-53A RTQQ	72-4-1A TNMH	74-21-1409A TNMK	Post. Gene
1	Larned	0;	S	S	S	0;	0;	S	17
2	Siouxland	0;	2=	2=	2=	2=	2=	2=	5,24,31
3	Lamar	0	;1-	2=	2=,S	0;	0;	2-,S	17,+
4	Arapahoe	0	0;	2=	2-	0;	0;	0;	5,6,17,24
5	CO860154	0	0;	23	23	0;	0;	0;	5,6,17,+
6	CO870258	0	0;	S	S	;,S	0;	0;	5,6,Seg17
7	CO870310	0,23	0;,2-2		2=	2,S	0;,S	S	Seg5,17
8	CO880240	0	0;	23	23	-	0;	0;	6
9	C0880054*	0	0	2=	2=	0;	0;	0;	5,6,17,24
10	C0880256*	0	0	S	S	0;	0;	0;	5,6,17
11	NE88536	0	0;	S	S	0;	0;	0;	5,6,17
12	NE89504*	0	0,2=	2=	2=	0;	0;	2-,0;	5,17,24,Seg6
13	NE89439*	2	2=	2-	2-	2=	2=	2=	24/31
14	NE88453*	0	0;	2=	2-	0;	0;	0;	2,6,17,24
15	TX89V4613	0;	2=	2=	2=	0;	0;	2=	17,24
16	TX89V5029	0;	0;	2=	2=	0;	0;	0;	6,17,31
17	2IWWSN-7159	0	2-,S	2=,S	S	0;	0;	S	5,17,+
18	TX88V4425	0	S	S	-	S	;,S	S	5
19	TXGH10209	2=	2=	2=	2=	2=	2=	2	24
20	TXGH10289	2=	2=	2=	1	2=	2=	2=	24
21	TX86A7210	0	;1-	2=	;1	0;	0;	;1	5,24
22	TX90V6132	2=	2=	2=	2=	2=	2	2	24
23	TX86D1340	0	0;	2=	0;	0;	0;	0;	5,6,17,24
24	TX90A9507*	0;	0;	2=	2=	0;	0;	0;	5,6,24
25	TX88A6840*	2=	2=	2=	2=	2=	2=	2-	24
26	QT542	0	S	S	S	S	S	S	5
27	XNH1401	0	S	S	S	S	S	S	5
28	XH1332	0	0;	2-	2=	;1-	0;	0;,2=	5,24,Seg6
29	XH1419	0	0;	2-	2=	2=	0;	0;	5,6,24
30	XH1438	0	2=	2	2=	;1	;1=	2=	5,24
31	WI88-024	0	2=	2=	2=	0;	0;	2=	5,17,24
32	ID0352*	S	S	S	S	S	S	S	None
33	N88L267*	0	2=	2-	;1-	0;	0;	2=	5,17,+
34	N86L107*	0	;1-N	2=	;1=N	0;	0;	S	5,10,17

Table 33.
Adult plant reaction of entries of the 1992 Western Plains Regional Performance Nursery to leaf and stem rust at St. Paul, MN. (by D.V. McVey, Cereal Rust Lab., U. of MN., St. Paul, MN., 55108)

Entry No.	Cultivar/ Designator	Leaf rust 7/1/92	Stem rust 7/1/92	Stem rust 7/16/92
1	LARNED	30S	20S	60S
2	SIOUXLAND	5S	TR	40MR-MS
3	LAMAR	TS	TR	60S
4	ARAPAHOE	5MS-S	TR	20MR-MS
5	CO860154	TMS-S	10S	50S
6	6CO870258	20S	30MS-S	60S
7	CO870310	60S	30S	60S
8	CO880240	30S	TR-MR	60S
9	CO880054	TMS-S	TR	10R
10	CO880256	20S	5MR	10MS-S
11	NE88536	TMS-S	TR-MR	40S
12	NE89504	20S	20MR-MS	40S
13	NE89439	30S	30MR	60S
14	NE88453	TS	TR	5R-MR
15	TX89V4613	5MS-S	TR	40S
16	TX89V5029	TMS-S	TR-MR	TR-MR
17	2IWWSN-7159	TMS-S	60S	80S
18	TX88V4425	TMS-S	60S	60S
19	TXGH10209	5MS-S	40MS-S	40MS-S
20	TXGH10289	5MS-S	TR	40MS-S
21	TX86A7210	TMS-S	TR	40MS-S
22	TX90V6132	TR	TMR-MS	60S
23	TX86D1340	TMR-MS	TMR-MS	20MS-S
24	TX90A9507	TMS-S	5MR-MS	50S
25	TX88A6840	TMS-S	5MR-MS	40MS-S
26	QT542	10S	60S	60S
27	XNH1401	TMS-S	50S	60S
28	XH1332	TMS-S	TR-MR	5R-MR
29	XH1419	TS	TR-MR	TR-MR
30	XH1438	TMS-S	TR-MR	40MS-S
31	WI88-024	5MS-5	5R-MR	40MS-S
32	ID0352	TMS	30S	60S
33	N88L267	TMR	TR	40MS-S
34	N86L107	TS	TS	60S

QUALITY DATA

Composites of 1-lb samples of each SRPN, NRPN, and WPRPN entry from harvested nursery sites are evaluated at the Hard Red Winter Wheat Quality Laboratory at Manhattan, Kansas. Results are reported to cooperators by the laboratory and are not included in this report.

UNIFORM WINTERHARDINESS NURSERIES

The nurseries are comprised of Southern and Northern Materials Sections. In 1992, the Southern Materials Section contained 209 entries and Northern Section 90 entries. Nursery lists and survival data appear in the tabulations that follow.

SOIL-BORNE MOSAIC NURSERY

In 1992 there were no entries for soil-borne mosaic evaluations other than those already included in the SRPN. Urbana, IL trials were lost due to severe cold in late October and early November. Data for the SRPN is included from R. M. Hunger and J. L. Sherwood, Oklahoma State University and is included in the SRPN section found earlier in this report.

1992
Uniform Winterhardiness Nursery
Southern Section

Entry No.	Variety or Pedigree	Sel. No.	Source
1	Warrior	CI13190	Check
2	Bulk Population	KS90HW53	Hays, KS
3	KS84HW200/Sumner	KS91HW11	"
4	KS84HW200/3/1644/2*Newton//Wichita	KS91HW19	"
5	Bounty 203/2157	KS91H40	"
6	2157//GB5761/TAM-105	KS91H111	"
7	Bounty 203//HF5761/TAM-105	KS91H134	"
8	" "	KS91H138	"
9	" "	KS91H144	"
10	Scout 66	CI13996	Check
11	Bounty 203//HF5761/TAM-105	KS91H149	Hays, KS
12	" "	KS91H153	"
13	" "	KS91H154	"
14	TAM-107//HF5761/TAM-105	KS91H158	"
15	" "	KS91H159	"
16	" "	KS91H163	"
17	" "	KS91H164	"
18	P4	KS91H174	"
19	P4	KS91H181	"
20	Vona	CI17441	Check
21	P4	KS91H182	Hays, KS
22	P4	KS91H183	"
23	P4	KS91H184	"
24	Hawk/(PKG16/Lov13//JGW3)//T108	KS84170E-8-2	Manhattan, KS
25	" "	KS84170E-7-1	"
26	(SMB/PCHU//KAL/BB)/T107//AKN	KS84273BB-10-3	"
27	F29-26/KS831440//Mustang	KS364D-6	"
28	KS82W418/Stephens	KS84W063-9-16	"
29	" "	KS84W063-9-7	"
30	Warrior	CI13190	Check
31	KS82W418/Stephens	KS84W063-9-12	Manhattan, KS
32	" "	KS84W063-9-18	"
33	" "	KS84W063-9-45	"
34	Karl/OR8305734	KS87807-11	"
35	" "	KS87807-23	"
36	Karl/OR8300764	KS87822-2	"
37	2157/Rocky//2165	HBE036J	"
38	2163/PL145//2163	HBC2080	"
39	2163/W9523A	HBE0780A	"
40	Scout 66	CI13996	Check
41	2163/W9523A	HBE0780B	Manhattan, KS
42	WX11088//2165/W8447	HBC059E	"
43	W8476B//Vona/W2420	HBE272A	"
44	1391//W8443C/2172	HBC458G	"
45	W1404/TX79A2729	HCC0076A	"

46	OK754615//KVK/T107/3/TX71A8899/2157	HBC696-108	"
47	HBZ419A/SGW054/2180	VBF0111-133	"
48	W0405D/Arkan//Arkan	VBG0048-158	"
49	WX12907/T108//W2440	HBE0363-134	"
50	Vona	CI17441	Check
51	W9476C/2163	HBE0779-152	Manhattan, KS
52	YW191/SXLD//TAM-105	VBE017-113	"
53	W9471A/W9523A//W3415	HBF0290-146	"
54	" "	HBF0190-144	"
55	" "	HBF0290-145	"
56	W2440/W9488A//2163	HBF0263-137	"
57	W9476C/2163//W9523A	HBF0302-148	"
58	W2415/W2439//2180	HBF0140-119	"
59	W9476C/2163//W0541A	HBF0303-156	"
60	Warrior	CI13190	Check
61	W9488A/2163//2180	HBF0337-112	Manhattan, KS
62	WX11731/2163//W9523A	HBF0435-130	"
63	SXLD/W2421//Pony	VBE0186-148	"
64	FL302/SXLD//W3415	HBF0576-140	"
65	W9488A/2163//2180	HBF0337-113	"
66	2154/Hawk//W0423A	HBF0361-124	"
67	2172/2163//W9419B	HBF0276-147	"
68	2163/W9523A	HBE0780-132	"
69	"	HBE0780-130	"
70	Scout 66	CI13996	Check
71	W8447D/W2436//W3420	HBF0425-155	Manhattan, KS
72	W2440/W2410//2165	VBF0223-108	"
73	" "	VBR0223-107	"
74	W2439/2172//W0402A	HBF0248-146	"
75	Quantum Hybrid Wheat	913050	HybriTech
76	" "	913051	"
77	" "	914370	"
78	" "	914371	"
79	" "	911110	"
80	Vona	CI17441	Check
81	Quantum Hybrid Wheat	911111	HybriTech
82	" "	91420	"
83	" "	91421	"
84	" "	919180	"
85	" "	919181	"
86	Ctk/3/At66/Cmn//TX2607-6/4/K74102-99	N86L022	NE, USDA
87	Brule/2/PIV/F26-70	N86L044	"
88	NE75424/3/NapHal/At66//NS 10-18	N86L107	"
89	NapHal/Lancer//Karlik 1/3/NS622/4/Ctk/ GK-Tiszataj/2/PIV	N86L177	"
90	Warrior	CI13190	Check
91	PIV/3/NapHal/Lancer/2/TX1682/NE70654	N88L267	NE, USDA
92	NE7060/4/IDO033/Purdue 4930//Moldova/3/NE7060	N89L087	"
93	IDO033/Purdue 4930//Moldova/3/NE7060/4/NE7060	N89L513	"
94	" "	N89L514	"
95	NE7060/VG19	N89L851	"
96	Mir. J. 50/3/F26-70//NapHal/CI13449/4/Chisholm	N90L012	"
97	Lindon/NE7060//NE7060	N90L029	"

98	NB69655/Sel. 14-50-3//Samson/4/Yt 54-N10B x Nar 59 "s" x Ndo/CI13438/3/At66/NapHal// Karlik 1/Lancota/5/Newton	N90L119	"
99	NE82438/NE7060	N91L018	"
100	Scout 66	CI13996	Check
101	NE82438/NE7060	N91L019	NE, USDA
102	OK83201/NE7060	N91L087	"
103	Rannaya/NE701136//CI13449/Ctk/3/TAM-105	N91L122	"
104	NapHal/At66//Lovrin 12/3/TX78V3630	N91L168	"
105	TX78V3630/4/Mir. J. 50/3/F26-70//NapHal/CI13449	N91L175	"
106	NE80413/2/Lindon/NE7060	N91L182	"
107	PIV/4/ND/CI13438//CJ,F1/3/CTFN*3/JN	N88V017	"
108	" "	N88V020	"
109	" "	N88V027	"
110	Vona	CI17441	Check
111	PIV/4/ND/CI13438//CJ,F1/3/CTFN*3/JN/5/ NB68570/Roussalka	N89V059	NE, USDA
112	" "	N89V065	"
113	F26-70/4/T.D. x A. Sqr./3/At66/NapHal// Likafen/NE701134	N89V153	"
114	" "	N89V154	"
115	TAM-105/7/New 66.5.1/5/Nrn 16/CI12500//Bsn /3/At66/Cmn//Wrr/4/Kr39/6/NE78892	N90V006	"
116	" "	N90V007	"
117	Rannaya/NE701136//CI13449/Ctk/3/TX79A2729	N90V015	"
118	" "	N90V021	"
119	" "	N90V027	"
120	Warrior	CI13190	Check
121	Rannaya/NE701136//CI13449/Ctk/3/TX80A5904	N90V035	NE, USDA
122	" "	N90V048	"
123	" "	N90V050	"
124	" "	N90V051	"
125	" "	N90V054	"
126	F53-70//NapHal/CI13449/Chisholm	N90V087	"
127	T.D. x A. Sqr/SD69103//Karlik 1/NE701134/3/ NapHal/Jang Kwang//Odessa 4/4/Newton	N90V106	"
128	" "	N90V109	"
129	" "	N90V112	"
130	Scout 66	CI13996	Check
131	TAM-107	PI495594	Check
132	Csm*3/3/Newton/Largo//2*Csm	OK88W833	Oklahoma
133	Cty sib/4/Aiv/3/Tcs//TI sib/Sdy	OK89499	"
134	2165/Cty sib	OK89399	"
135	OK83197/Sxl	OK89421	"
136	TX78V2154/Siouxland	TX88V4636	Texas
137	Vona/TX71D4889-V3	TX84V1418HF	"
138	Karl Resel.	TX88V5440	"
139	TX78V2154/Siouxland	TX88V4635	"
140	Vona	CI17441	Check
141	TAM-105/3/NE70654/BBY/Bow's'	TX87V1613	Texas
142	NE78696/Payne	TX88V4524	"
143	TAM-200//TX38949-2/TAM-107	TX89V4138	"
144	Karl Resel.	TX88V5433	"

145	Siouxland/TAM-101	TX88A6480	"
146	TX71A889/TAM-101	TX88A6533	"
147	TX73165/Sandy	CO860086	Colorado
148	NE76667/Hawk	CO860094	"
149	Sandy/Hail	CO860235	"
150	Warrior	CI13190	Check
151	Arkan/Hawk	CO870449	Colorado
152	Bulk Selection	KSSB-369-7	Kansas
153	Karl sib	KS831374-142	"
154	Hawk/(Pkg16/Lov13//Jgw13)//TAM-108	KS84170E-8-3	"
155	TX71A889/2172//2157	HBC302E	"
156	Lr16/Lr17//Larned/3/Cheney/Larned/4/ Bnt sib/5/TAM107	KS87H325-2	"
157	Dular/Eagle//2*Cheney/Larned/3/Colt	KS89H48-1	"
158	" "	KS89H50-4	"
159	NE69565//NE65671/NE69655/3/Homestead/4/ Ctk/3/At66/Cmn//TX2607-6	N87V106	NE, USDA
160	Scout 66	CI13996	Check
161	Arkan/Colt//Chisholm sib	NE88595	Nebraska
162	Bennett/TAM-107	NE88427	"
163	Centura/Dawn//Colt sib	NE88584	"
164	" "	NE88588	"
165	Quantum Hybrid Wheat	XH1319	HybriTech
166	" "	XH1436	"
167	" "	XH1437	"
168	" "	XH1497	"
169	Colt/Victory	W87-018	AgriPro
170	Vona	CI17441	Check
171	WI81-133/Arkan	WI88-181	AgriPro
172	W84-179/W81-171	WI88-028	"
173	TAM-107/TAM-105	T13	Trio
174	2165/Vona	T67	"
175	TAM-108/Lancota	T21-3	"
176	HRW Hybrid	TH901	"
177	HRW Hybrid	TH902	"
178	TAM-105/Sandy	CO860154	Colorado
179	Carson/Sandy	CO870258	"
180	Warrior	CI13190	Check
181	Oslo/Sandy//Hawk	CO870310	Colorado
182	Colt/TX80GH3006	CO880240	"
183	Lov13/2* Ctk 78//TAM-105	CO880054	"
184	Colt/TX3006	CO880256	"
185	T. Diccocoides/Brule//Arkan	NE88536	Nebraska
186	NE69613/Sage//Migro Archer	NE89504	"
187	TAM-107 x Larned x Brule seln.	NE89439	"
188	Wrr 5*/Agent//Aurora/3/Ctk 78/4/Brule	NE88453	"
189	KS81H1640GB/TX78V2154	TX89V4613	Texas
190	Scout 66	CI13996	Check
191	Brule/Vee's'	TX89V5029	Texas
192	CO693591/Ctk	2IWWSN-7159	"
193	Agate/TAM-105	TX88V4425	"
194	(TAM-105*4/Ami)*4//Largo	TXGH10209	"
195	(TAM-105*4/Ami)*4//Largo	TXGH10289	"

196	Syl/Vona	TX86A7210	"
197	TX86V1540/TX78V2430-4	TX90V6132	"
198	Siouxland//Nadadores 63/Sturdy	TX86D1340	"
199	Siouxland/TAM-101	TX90A9507	"
200	Vona	CI17441	Check
201	TAM-105*4/Amigo*5//Largo	TX88A6840	Texas
202	Quantum Hybrid Wheat	QT542	Hybritech
203	" "	XNH1401	"
204	" "	XH1332	"
205	" "	XH1419	"
206	" "	XH1438	"
207	NS2630/Thunderbird	WI88-024	Agripro
208	TK/Burt/5/SM6/4/2*IT/UT175A-53//BDLSBurt/3/ CI13438/6/TK/Burt/Bez1	IDO352	Idaho
209	Warrior	CI13190	Check

1992 Uniform Winterhardiness Nursery
Southern Section

Entry No.	Sel. No.	Rosemount, MN		Brookings, SD		Highmore, SD		Mead, NE		Casselton, ND		5 Site
		Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Mean
		% survival										
1	CI13190	92	90	0	90	30	40	100	100	70	70	68.2
2	KS90HW53	2	20	0	0	100	60	10	10	5	10	21.7
3	KS91HW11	70	70	0	0	100	70	60	40	10	10	43.0
4	KS91HW19	95	65	0	0	80	80	90	90	55	60	61.5
5	KS91H40	80	50	0	5	60	90	100	100	60	65	61.0
6	KS91H111	3	40	0	0	50	30	80	70	40	15	32.8
7	KS91H134	60	65	0	0	20	20	90	80	40	30	40.5
8	KS91H138	70	88	0	0	10	10	90	60	25	30	38.3
9	KS91H144	92	95	0	10	80	100	90	80	60	75	68.2
10	CI13996	98	98	10	70	50	60	90	80	60	85	70.1
11	KS91H149	80	88	0	0	40	60	70	50	5	50	44.3
12	KS91H153	85	85	0	0	50	60	60	80	25	30	47.5
13	KS91H154	65	80	0	0	30	90	50	70	60	10	45.5
14	KS91H158	92	90	5	50	30	90	90	90	60	85	68.2
15	KS91H159	90	84	5	60	100	50	90	100	45	70	69.4
16	KS91H163	90	85	0	10	100	100	100	90	40	80	69.5
17	KS91H164	95	90	0	80	100	100	100	100	40	90	79.5
18	KS91H174	98	92	0	30	0	20	60	50	20	55	42.5
19	KS91H181	95	86	0	10	5	5	60	40	10	60	37.1
20	CI17441	30	2	0	0	0	80	50	70	15	50	29.7
21	KS91H182	80	84	0	50	5	5	60	50	10	40	38.4
22	KS91H183	97	92	0	60	40	5	70	50	55	70	53.9
23	KS91H184	50	25	0	5	5	5	20	20	35	55	22.0
24	KS8417OE-8-2	92	90	0	10	60	10	100	90	15	65	53.2
25	KS8417OE-7-1	85	94	0	50	100	80	100	90	25	60	68.4
26	KS84273BB-10-	50	15	0	0	30	70	80	60	25	85	41.5
27	KS364D-6	25	2	0	0	10	80	80	50	30	80	35.7
28	KS84W063-9-16	3	5	0	0	0	30	100	60	30	75	30.3
29	KS84W063-9-7	5	15	0	0	100	40	50	50	25	35	32.0
30	CI13190	84	99	80	90	100	50	100	90	50	65	80.8
31	KS84W063-9-12	5	5	0	0	50	70	20	35	15	65	26.5
32	KS84W063-9-18	5	84	0	0	100	30	20	30	5	65	33.9
33	KS84W063-9-45	5	60	0	0	40	30	10	5	10	50	21.0
34	KS87807-11	90	99	10	0	60	10	100	100	55	90	61.4
35	KS87807-23	80	85	10	0	80	20	90	40	50	85	54.0
36	KS87822-2	50	70	0	0	80	20	50	20	15	65	37.0
37	HBE036J	75	65	0	30	80	100	100	80	55	60	64.5
38	HBC2080	4	75	0	5	90	60	80	60	20	40	43.4
39	HBE0780A	5	90	0	0	90	90	80	60	30	60	50.5
40	CI13996	96	90	60	10	100	100	100	80	50	85	77.1

1992 UWHN, Southern Section

Entry No.	Sel. No.	Rosemount, MN		Brookings, SD		Highmore, SD		Mead, NE		Casselton, ND		5 Site
		Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Mean
		% survival										
41	HBE0780B	40	75	0	0	100	100	90	90	15	70	58.0
42	HBC059E	60	84	0	0	90	100	100	90	35	75	63.4
43	HBE272A	1	4	0	0	100	80	90	70	20	85	45.0
44	HBC458G	20	35	0	0	100	90	90	80	15	85	51.5
45	HCC0076A	60	60	0	0	100	60	100	80	30	75	56.5
46	HBC696-108	60	60	0	0	80	20	60	40	30	65	41.5
47	VBF0111-133	70	70	0	0	80	60	50	50	20	60	46.0
48	VBG0048-158	60	70	0	0	20	80	60	70	55	85	50.0
49	HBE0363-134	40	86	0	0	70	10	100	90	35	75	50.6
50	CI17441	8	35	0	0	20	0	90	70	35	75	33.3
51	HBE0779-152	70	70	0	0	10	5	90	40	20	65	37.0
52	VBE017-113	75	84	0	0	80	30	90	40	45	65	50.9
53	HBF0290-146	30	75	0	0	100	60	100	80	45	55	54.5
54	HBF0190-144	50	80	0	0	90	70	100	90	40	60	58.0
55	HBF0290-145	40	50	0	0	80	70	100	90	35	60	52.5
56	HBF0263-137	70	90	0	0	60	60	90	90	30	85	57.5
57	HBF0302-148	30	85	0	0	30	50	80	80	10	65	43.0
58	HBF0140-119	40	75	0	0	40	60	90	90	55	65	51.5
59	HBF0303-156	5	60	0	0	20	50	80	90	55	65	42.5
60	CI13190	98	95	0	80	100	50	100	100	65	85	77.3
61	HBF0337-112	70	84	0	5	90	30	100	90	55	55	57.9
62	HBF0435-130	60	60	0	0	10	5	80	50	30	25	32.0
63	VBE0186-148	3	10	0	0	0	5	40	30	15	35	13.8
64	HBF0576-140	10	20	0	0	10	0	60	50	15	30	19.5
65	HBF0337-113	60	75	0	10	0	30	100	80	65	85	50.5
66	HBF0361-124	5	15	0	10	10	5	60	70	50	55	28.0
67	HBF0276-147	10	50	0	0	80	10	70	80	40	30	37.0
68	HBE0780-132	40	84	0	0	80	30	70	80	35	35	45.4
69	HBE0780-130	70	90	0	0	100	60	100	70	65	40	59.5
70	CI13996	92	98	0	30	70	70	100	80	85	85	71.0
71	HBF0425-155	4	95	0	0	30	5	90	50	55	10	33.9
72	VBF0223-108	2	55	0	0	90	70	90	50	45	30	43.2
73	VBR0223-107	1	88	0	0	90	70	80	70	10	15	42.4
74	HBF0248-146	1	40	0	0	30	40	90	60	40	20	32.1
75	913050	90	86	0	5	10	5	100	60	50	30	43.6
76	913051	90	94	0	5	0	60	100	80	85	85	59.9
77	914370	60	70	0	0	10	0	5	5	5	5	16.0
78	914371	70	70	0	0	0	0	10	10	15	15	19.0
79	911110	65	80	5	5	50	5	100	60	30	65	46.5
80	CI17441	5	40	0	0	60	10	100	70	30	80	39.5

1992 UWHN, Southern Section

Entry No.	Sel. No.	Rosemount, MN		Brookings, SD		Highmore, SD		Mead, NE		Casselton, ND		5 Site
		Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Mean
		% survival										
81	911111	75	80	0	70	70	40	100	90	35	80	64.0
82	91420	30	85	0	20	50	40	90	60	30	65	47.0
83	91421	40	75	0	0	90	50	80	60	40	75	51.0
84	919180	40	85	0	0	10	50	80	50	10	50	37.5
85	919181	40	60	0	5	5	30	0	0	5	5	15.0
86	N86L022	30	85	0	10	90	90	100	80	90	85	66.0
87	N86L044	50	80	0	0	70	90	100	80	70	70	61.0
88	N86L107	50	80	5	5	100	70	100	90	85	65	65.0
89	N86L177	5	70	0	0	30	20	80	70	40	55	37.0
90	CI13190	92	84	20	80	20	10	90	90	90	100	67.6
91	N88L267	70	84	10	30	10	5	90	80	15	70	46.4
92	N89L087	8	45	0	0	0	0	40	50	10	10	16.3
93	N89L513	50	50	0	0	0	60	60	60	15	60	35.5
94	N89L514	50	60	0	0	60	70	70	90	15	60	47.5
95	N89L851	3	0	0	0	100	10	0	10	5	5	13.3
96	N90L012	84	65	0	0	20	30	60	70	10	80	41.9
97	N90L029	84	70	5	0	90	90	80	80	20	75	59.4
98	N90L119	90	75	40	0	100	90	50	80	35	75	63.5
99	N91L018	92	5	10	0	80	90	70	80	35	50	51.2
100	CI13996	99	70	30	0	10	80	90	90	60	65	59.4
101	N91L019	96	60	0	10	10	80	100	100	50	60	56.6
102	N91L087	85	5	0	0	0	60	40	90	20	35	33.5
103	N91L122	95	65	50	10	10	80	90	90	50	80	62.0
104	N91L168	95	65	0	0	10	80	20	60	35	70	43.5
105	N91L175	92	70	5	5	10	40	100	100	45	90	55.7
106	N91L182	92	90	0	0	80	60	80	80	55	80	61.7
107	N88V017	84	75	0	0	30	20	80	100	60	65	51.4
108	N88V020	50	80	0	0	20	40	90	90	40	50	46.0
109	N88V027	65	80	0	0	10	10	100	100	5	40	41.0
110	CI17441	6	60	0	0	10	60	100	50	50	65	40.1
111	N89V059	10	50	0	0	10	60	50	30	25	60	29.5
112	N89V065	8	10	0	0	30	60	100	50	15	80	35.3
113	N89V153	20	75	0	0	30	80	70	40	25	55	39.5
114	N89V154	25	70	0	0	20	70	80	50	55	65	43.5
115	N90V006	5	70	0	0	30	80	70	40	60	45	40.0
116	N90V007	4	65	0	0	10	10	80	50	60	65	34.4
117	N90V015	40	65	0	0	90	0	90	65	50	60	46.0
118	N90V021	15	60	0	0	70	0	90	60	45	75	41.5
119	N90V027	15	84	0	0	0	5	70	50	50	65	33.9
120	CI13190	90	94	0	60	40	80	100	90	80	90	72.4

1992 UWHN, Southern Section

Entry No.	Sel. No.	Rosemount, MN		Brookings, SD		Highmore, SD		Mead, NE		Casselton, ND		5 Site
		Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Mean
		% survival										
121	N90V035	92	84	0	10	0	60	100	90	60	70	56.6
122	N90V048	84	84	0	70	0	40	100	90	65	75	60.8
123	N90V050	84	84	0	0	40	60	70	70	75	60	54.3
124	N90V051	20	40	0	10	80	70	60	70	70	45	46.5
125	N90V054	88	75	0	40	90	60	100	80	65	60	65.8
126	N90V087	4	75	0	0	70	90	80	70	65	55	50.9
127	N90V106	1	70	0	0	70	90	80	90	50	20	47.1
128	N90V109	0	15	0	0	90	50	80	80	25	60	40.0
129	N90V112	1	65	0	0	90	60	100	100	30	60	50.6
130	CI13996	60	90	0	20	70	70	90	80	80	85	64.5
131	PI495594	30	88	0	10	0	60	80	80	70	55	47.3
132	OK88W833	2	70	0	0	0	30	80	60	55	55	35.2
133	OK89499	6	25	0	10	5	5	40	50	20	45	20.6
134	OK89399	25	70	0	0	5	40	70	70	70	40	39.0
135	OK89421	40	75	0	5	50	60	100	80	75	45	53.0
136	TX88V4636	10	15	0	0	50	10	50	60	30	35	26.0
137	TX84V1418HF	10	10	0	0	30	10	100	100	35	55	35.0
138	TX88V5440	50	70	0	5	50	50	100	80	65	85	55.5
139	TX88V4635	0	15	0	0	0	60	60	40	65	30	27.0
140	CI17441	5	10	0	0	60	70	100	80	35	40	40.0
141	TX87V1613	20	60	0	10	90	90	90	80	35	40	51.5
142	TX88V4524	25	40	0	5	40	70	90	60	35	60	42.5
143	TX89V4138	1	5	0	0	40	30	80	40	15	35	24.6
144	TX88V5433	80	65	10	20	90	20	100	100	50	80	61.5
145	TX88A6480	30	40	5	60	60	0	70	50	40	65	42.0
146	TX88A6533	40	50	20	60	60	0	90	70	65	75	53.0
147	C0860086	30	80	20	10	5	10	90	90	55	65	45.5
148	C0860094	65	85	20	10	40	20	100	100	85	90	61.5
149	C0860235	70	85	10	30	80	70	100	90	50	65	65.0
150	CI13190	95	95	60	40	70	80	100	100	75	95	81.0
151	C0870449	10	65	0	0	40	10	50	30	15	70	29.0
152	KSSB-369-7	5	25	0	0	80	10	20	10	10	5	16.5
153	KS831374-142	80	75	0	5	60	20	80	80	65	65	53.0
154	KS84170E-8-3	65	75	0	5	60	100	80	60	55	45	54.5
155	HBC302E	70	75	0	0	80	60	20	30	15	20	37.0
156	KS87H325-2	96	85	0	0	90	10	60	70	35	30	47.6
157	KS89H48-1	98	92	0	20	100	20	80	90	60	45	60.5
158	KS89H50-4	99	98	60	5	50	30	70	90	60	40	60.2
159	N87V106	99	98	50	10	50	30	75	80	55	85	63.2
160	CI13996	99	98	70	5	60	80	90	90	80	75	74.7

1992 UWHN, Southern Section

Entry No.	Sel. No.	Rosemount, MN Rep 1	Rosemount, MN Rep 2	Brookings, SD Rep 1	Brookings, SD Rep 2	Highmore, SD Rep 1	Highmore, SD Rep 2	Mead, NE Rep 1	Mead, NE Rep 2	Casselton, ND Rep 1	Casselton, ND Rep 2	5 Site Mean
		% survival										
161	NE88595	99	95	80	80	0	10	90	100	70	70	69.4
162	NE88427	84	70	60	60	5	5	90	100	75	70	61.9
163	NE88584	95	85	40	70	10	0	90	90	65	65	61.0
164	NE88588	92	90	0	20	20	20	80	90	65	65	54.2
165	XH1319	92	70	40	5	70	20	60	80	70	40	54.7
166	XH1436	90	70	20	0	60	30	70	80	50	50	52.0
167	XH1437	55	40	10	0	70	70	80	90	35	60	51.0
168	XH1497	94	70	0	0	90	60	90	90	35	75	60.4
169	W87-018	92	70	0	10	100	50	80	80	65	75	62.2
170	CI17441	40	65	0	0	5	40	20	90	40	60	36.0
171	WI88-181	70	20	0	0	5	0	90	70	15	25	29.5
172	WI88-028	88	20	70	0	10	0	100	30	15	5	33.8
173	T13	85	45	0	50	100	10	100	100	70	60	62.0
174	T67	80	40	10	0	100	20	80	80	35	55	50.0
175	T21-3	50	50	0	0	70	10	100	90	40	50	46.0
176	TH901	50	30	0	0	60	90	70	90	30	40	46.0
177	TH902	75	50	10	0	90	90	100	90	50	60	61.5
178	C0860154	80	50	0	5	50	80	100	100	55	65	58.5
179	C0870258	70	25	70	0	60	80	90	90	70	65	62.0
180	CI13190	92	80	0	10	90	0	100	100	65	85	62.2
181	C0870310	90	10	0	0	60	90	90	80	25	55	50.0
182	C0880240	50	15	0	0	60	90	100	90	65	80	55.0
183	C0880054	5	0	0	0	30	90	90	70	30	60	37.5
184	C0880256	35	5	10	0	50	80	100	100	20	65	46.5
185	NE88536	85	75	70	20	90	90	100	100	80	85	79.5
186	NE89504	85	65	50	20	10	90	100	100	80	90	69.0
187	NE89439	55	65	10	10	30	90	90	90	75	90	60.5
188	NE88453	85	70	0	50	10	10	90	100	65	95	57.5
189	TX89V4613	40	10	0	0	50	80	40	70	15	75	38.0
190	CI13996	88	75	0	70	40	60	80	90	45	85	63.3
191	TX89V5029	50	25	0	0	70	10	70	70	40	65	40.0
192	2IWWSN-7159	80	50	0	10	70	40	80	100	60	85	57.5
193	TX88V4425	94	60	0	60	90	80	100	90	65	65	70.4
194	TXGH10209	95	50	5	10	100	80	90	80	65	90	66.5
195	TXGH10289	84	40	0	0	100	80	90	80	75	75	62.4
196	TX86A7210	70	0	0	0	100	70	80	80	70	75	54.5
197	TX90V6132	84	5	0	0	50	70	70	70	60	75	48.4
198	TX86D1340	88	10	40	0	60	60	60	80	40	75	51.3
199	TX90A9507	80	5	0	0	20	10	80	80	40	85	40.0
200	CI17441	20	15	0	0	10	5	80	70	70	70	34.0

1992 UWHN, Southern Section

Entry No.	Sel. No.	Rosemount, MN Rep 1	Rosemount, MN Rep 2	Brookings, SD Rep 1	Brookings, SD Rep 2	Highmore, SD Rep 1	Highmore, SD Rep 2	Mead, NE Rep 1	Mead, NE Rep 2	Casselton, ND Rep 1	Casselton, ND Rep 2	5 Site Mean
		% survival										
201	TX88A6840	85	65	60	5	40	20	100	100	55	85	61.5
202	QT542	94	80	20	70	100	90	90	100	65	75	78.4
203	XNH1401	94	80	0	0	20	30	100	100	75	70	56.9
204	XH1332	88	75	0	20	40	60	100	100	80	75	63.8
205	XH1419	90	70	0	30	30	50	100	100	60	90	62.0
206	XH1438	80	30	0	10	10	50	80	100	40	65	46.5
207	WI88-024	80	65	20	5	30	70	50	50	30	65	46.5
208	ID0352	98	90	80	5	30	80	100	100	55	65	70.3
209	CI13190	88	96	90	90	20	80	100	100	65	85	81.4
	Mean	59		10		49		76		52		49.2
	LSD.05	46		34		53		25		32		23.6
	CV	39.6		181.2		54.8		16.7		31.0		40.6

1992
Uniform Winterhardiness Nursery
Northern Section

Entry No.	Variety or Pedigree	Sel. No.	Source
1	Norstar	CI17735	Check
2	Mvr/KS79379//Nsr/3/Sxld	ND8886	No. Dakota
3	Mvr/KS79397//Nsr/3/Cody	ND8889	"
4	Rrr//ND7896/SD76598	ND8924	"
5	Nsr//ND7793/SD76598	ND8927	"
6	Seward/Archer	ND8973	"
7	Seward/Colt	ND8983	"
8	ND8095/Agassiz	ND8987	"
9	Bnt/Rose	SD89261	So. Dakota
10	Warrior	CI13190	Check
11	Brule/Nell	SD89143	So. Dakota
12	Rose/Dawn	SD89101	"
13	Bnt/Sxld	SD89291	"
14	Bnt/Sxld	SD89285	"
15	Brule/Agate	SD89122	"
16	Bnt/Sxld	SD89281	"
17	Brule/TX79A2729	SD89305	"
18	Brule/Nell	SD89146	"
19	Brule/Agate	SD89117	"
20	Centurk 78	CI17724	Check
21	Bnt/Rose	SD89270	So. Dakota
22	Brule/TX78V3630	SD89127	"
23	SD76598-7/Rita	SD89161	"
24	Rose/Ctk	SD89131	"
25	Bnt/Rose	SD89269	"
26	Ctk 78/Nell	SD89186	"
27	Rose/Ctk	SD89132	"
28	Wnk/Sxld	SD89347	"
29	Brule/Rita	SD89245	"
30	Norstar	CI17735	Check
31	Bnt/Rita	SD89197	So. Dakota
32	Brule/Rita	SD89246	"
33	Brule/Nell	SD89149	"
34	TX78V3630/Lco	SD89266	"
35	Gent/Sxld	SD89334	"
36	NE77682/Dawn	SD89205	"
37	Wnk/Dawn	SD89108	"
38	SD75284/Agate	SD89256	"
39	Brule/OK754615E	SD89153	"
40	Warrior	CI13190	Check
41	Complex Pedigree	NE83432	So. Dakota
42	Quantum Hybrid Wheat	QT549	HybriTech
43	" "	QT542	"
44	" "	9030001	"
45	" "	9030002	"
46	" "	XNH1401	"

47	"	9030201	"
48	"	9030202	"
49	"	XNH1500	"
50	Centurk 78	CI17724	Check
51	Quantum Hybrid Wheat	9030704	HybriTech
52	"	9030705	"
53	Kharkof	CI1442	Check
54	Roughrider	CI17439	"
55	Colt	PI476975	"
56	Brule/Dawn	SD88201	So. Dakota
57	TX78V3630/Lco	SD88137	"
58	Rri/Siouxland	SD88171	"
59	Brule/Dawn	SD88185	"
60	Norstar	CI17735	Check
61	Lco/Frd//NE69559/Wnk/3/Nell	SD87143	So. Dakota
62	Brule/Dawn	SD88191	"
63	Bennett/Rose	SD89271	"
64	Bennett/Dawn	SD89204	"
65	NAPB 80300/Centurk 78	SD89102	"
66	Wnk/SD6914//Siouxland	ND8844	No. Dakota
67	Mvr/KS79397//Nsr/3/Siouxland	ND8892	"
68	Nsr/3/Mnt/NB68466//SD76705	ND8930	"
69	Nsr/4/Ctk//Wnk/Uln/3/SD76694	ND8933	"
70	Warrior	CI13190	Check
71	Seward sib/NE80413	ND8944	No. Dakota
72	Seward/SD76705	ND8955	"
73	Bnz//Frd/Lcr/3/Bnz/Mrt-2	ND89142	"
74	T. Diccocoides/Brule//Arkan	NE88536	Nebraska
75	Colt*2/Chisholm	NE87513	"
76	Siouxland/NE7060	NE89479	"
77	TX80GH2679/Brule seln.	NE89522	"
78	Lancota seln/Sxld//TX792729	NE89526	"
79	Brule/3/Parker*4/Agent//Bell98/Lancer	NE89657	"
80	Centurk 78	CI17724	Check
81	Quantum Hybrid Wheat	XNH1597	HybriTech
82	"	XNH1598	"
83	"	XNH1605	"
84	"	XNH1629	"
85	Msc/Ctk A+//Iul	MT8713	Montana
86	Rri/MT6928	MT8719	"
87	Winalta/Bezostaya	W-193	Alberta
88	"	W-198	"
89	"	W-236	"
90	Norstar	CI17735	Check

1992 Uniform Winterhardiness Nursery
Northern Section

Entry No.	Sel. No.	Rosemount, MN Rep 1	Rosemount, MN Rep 2	Brookings, SD Rep 1	Brookings, SD Rep 2	Highmore, SD Rep 1	Highmore, SD Rep 2	Casselton, ND Rep 1	Casselton, ND Rep 2	4 Site Mean
		% survival								
1	CI17735	92	100	100	70	100	70	100	90	90.3
2	ND8886	100	100	10	90	90	80	95	75	80.0
3	ND8889	100	100	60	80	90	90	100	80	87.5
4	ND8924	100	100	100	60	100	100	90	65	89.4
5	ND8927	100	100	100	20	100	70	100	75	83.1
6	ND8973	100	100	100	20	100	60	95	80	81.9
7	ND8983	100	100	100	90	40	40	90	70	78.8
8	ND8987	100	100	100	0	100	100	75	90	83.1
9	SD89261	87	100	10	0	10	60	65	85	52.1
10	CI13190	90	100	40	30	5	0	95	85	55.6
11	SD89143	90	100	20	30	80	100	90	75	73.1
12	SD89101	75	100	5	0	70	20	85	60	51.9
13	SD89291	95	100	90	10	30	40	90	55	63.8
14	SD89285	85	100	40	10	30	60	85	85	61.9
15	SD89122	95	100	0	5	60	70	80	80	61.3
16	SD89281	100	100	60	5	40	80	80	90	69.4
17	SD89305	90	100	20	5	30	40	70	80	54.4
18	SD89146	90	100	60	80	5	70	70	75	68.8
19	SD89117	88	100	0	60	10	90	90	75	64.1
20	CI17724	60	100	10	5	20	60	95	80	53.8
21	SD89270	100	100	70	10	80	50	95	70	71.9
22	SD89127	100	100	5	0	10	5	65	65	43.8
23	SD89161	100	100	5	20	90	20	70	85	61.3
24	SD89131	100	100	0	0	70	40	60	75	55.6
25	SD89269	100	100	10	10	30	70	75	75	58.8
26	SD89186	100	100	10	60	20	90	85	85	68.8
27	SD89132	100	100	20	80	20	80	85	90	71.9
28	SD89347	100	100	60	100	90	80	75	90	86.9
29	SD89245	100	100	0	10	100	30	80	55	59.4
30	CI17735	100	100	0	100	100	60	90	90	80.0
31	SD89197	67	100	100	20	100	40	85	85	74.6
32	SD89246	100	100	5	0	90	20	60	65	55.0
33	SD89149	90	100	40	40	100	60	70	85	73.1
34	SD89266	100	100	50	80	60	70	85	80	78.1
35	SD89334	100	65	10	60	50	90	90	80	68.1
36	SD89205	100	60	5	0	50	80	60	65	52.5
37	SD89108	100	100	5	60	20	70	90	70	64.4
38	SD89256	100	90	5	40	20	50	80	85	58.8
39	SD89153	100	90	5	60	10	70	80	85	62.5
40	CI13190	88	90	20	30	90	10	90	95	64.1

1992 UWHN, Northern Section

Entry No.	Sel. No.	Rosemount, MN		Brookings, SD		Highmore, SD		Casselton, ND		4 Site Mean
		Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	
		% survival								
41	NE83432	82	95	20	0	80	30	80	90	59.6
42	QT549	82	90	0	100	70	60	85	85	71.5
43	QT542	80	80	60	20	90	60	85	75	68.8
44	9030001	75	80	40	50	80	90	85	85	73.1
45	9030002	40	80	5	20	90	90	90	85	62.5
46	XNH1401	60	80	5	20	90	100	85	55	61.9
47	9030201	60	75	5	10	10	80	90	70	50.0
48	9030202	50	60	10	5	80	20	65	85	46.9
49	XNH1500	70	90	30	5	90	10	65	85	55.6
50	CI17724	60	40	0	20	40	30	75	85	43.8
51	9030704	70	70	10	30	80	70	65	70	58.1
52	9030705	85	60	30	10	90	90	65	60	61.3
53	CI1442	100	95	50	20	90	100	85	85	78.1
54	CI17439	100	100	100	100	30	50	95	90	83.1
55	PI476975	50	75	20	10	80	100	60	70	58.1
56	SD88201	90	100	90	10	90	50	65	90	73.1
57	SD88137	100	100	60	5	90	50	85	85	71.9
58	SD88171	100	100	50	70	80	50	90	90	78.8
59	SD88185	60	70	10	5	100	50	60	65	52.5
60	CI17735	100	100	100	100	90	40	90	75	86.9
61	SD87143	90	100	90	30	40	30	90	65	66.9
62	SD88191	90	100	20	0	90	60	65	70	61.9
63	SD89271	90	100	20	5	20	60	70	65	53.8
64	SD89204	90	100	30	0	60	80	40	50	56.3
65	SD89102	95	100	50	0	20	80	95	75	64.4
66	ND8844	95	100	100	70	40	80	100	80	83.1
67	ND8892	100	100	30	10	80	90	90	70	71.3
68	ND8930	100	100	100	0	80	90	85	65	77.5
69	ND8933	100	100	100	100	70	80	75	60	85.6
70	CI13190	90	100	50	50	60	40	90	60	67.5
71	ND8944	100	100	50	60	40	30	65	65	63.8
72	ND8955	100	100	100	90	80	90	90	65	89.4
73	ND89142	100	100	90	30	20	90	85	65	72.5
74	NE88536	100	100	5	10	40	90	90	65	62.5
75	NE87513	90	80	0	5	60	100	55	50	55.0
76	NE89479	75	60	20	20	70	70	90	70	59.4
77	NE89522	80	70	10	40	60	40	70	60	53.8
78	NE89526	70	85	60	100	50	40	65	45	64.4
79	NE89657	75	80	20	100	30	30	65	60	57.5
80	CI17724	70	80	10	10	100	40	85	75	58.8

1992 UWHN, Northern Section

Entry No.	Sel. No.	Rosemount, MN Rep 1	Rosemount, MN Rep 2	Brookings, SD Rep 1	Brookings, SD Rep 2	Highmore, SD Rep 1	Highmore, SD Rep 2	Casselton, ND Rep 1	Casselton, ND Rep 2	4 Site Mean
		% survival								
81	XNH1597	75	70	10	20	50	100	40	10	46.9
82	XNH1598	90	90	5	5	60	100	65	10	53.1
83	XNH1605	90	90	0	70	70	80	70	60	66.3
84	XNH1629	67	75	0	0	90	70	65	30	49.6
85	MT8713	100	100	90	0	90	90	80	35	73.1
86	MT8719	100	100	90	5	90	100	60	40	73.1
87	W-193	100	100	5	5	90	40	50	50	55.0
88	W-198	100	100	40	80	20	50	85	45	65.0
89	W-236	100	100	0	40	10	60	80	50	55.0
90	CI17735	-	-	40	90	50	70	50	10	51.7
	Mean	90		36		63		75		65.8
	LSD.05	17		61		N.S.		23		25.6
	CV	9.4		85.3		44.1		15.7		33.3

Note: Seed of Norstar (CI17735) had reduced germination and emergence in this trial, affecting its winter survival.